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The C.E. Thomas✓ Nurseries

BRUEN WEBB BLDG., TAMPA, FLORIDA.

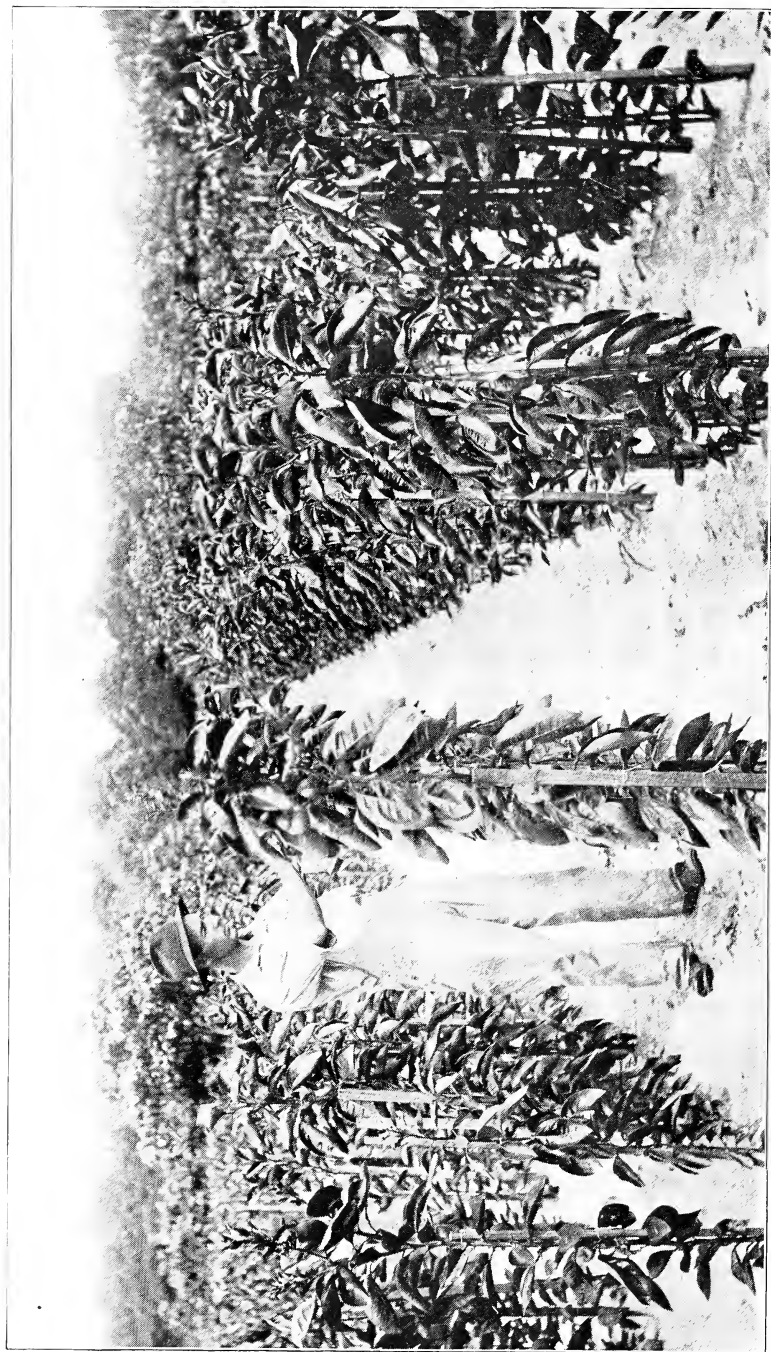


' GUARANTEED TREES
for
SOUTHERN STATES

1924/1720

CATALOGUE
OF
THE C. E. THOMAS
NURSERIES
(NOT INC.)

Office
Bruen Webb Building
TAMPA, FLORIDA



Grapefruit and Orange Trees at Our Nurseries. Every Tree Receives Constant and Careful Attention to Insure as Perfect Stock as Can Possibly Be Grown

FOREWARD

In offering our latest catalog, we believe that we have listed all of the best Citrus fruits adapted to Florida, as well as the best varieties of Avocados, peaches, pecans, grapes and figs. We have also endeavored to give our purchasers much valuable information regarding preparing the ground for planting trees, fertilizing and caring for same.

The information we have given is thoroughly reliable and is quoted largely from men who have been with the United States Agricultural Department and made these matters their study for many years.

While our office is located in Tampa, Florida, our main Nurseries are located at Lutz, Florida, fourteen miles north of Tampa, on a hard surfaced road from Tampa. We also have nurseries in the Winter Haven, Bloomingdale and Odessa districts. The above localities are noted for their special adaptability to Citrus fruit culture and as being ideal locations for raising Nursery stock.

All of our Nurseries are in the care and under the supervision of thoroughly competent and experienced Nurserymen. Our Nursery at Lutz is managed and cared for by one of the best Nurserymen in the State. He has been in the business for many years. He has made a life study of it and his hobby is the raising of the best Citrus fruit trees that it is possible to produce.

Every tree which we sell has been budded from selected bud wood so that we can justly claim that our trees are pedigreed stock. All of our larger sized trees are budded on to roots ranging from 3 to 4 years of age so that a good root system will be assured.

Our trees are in perfect condition and we will have plenty of all kinds of stock listed in this catalog in all sizes from 3½ to 7½ feet, which trees



A Block of Excelsior Grapefruit at One of Our Nurseries Showing Growth Attained the Second Year. Note the Smooth Clean Trunks Denoting Perfect Growth

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will caliper from $\frac{5}{8}$ to $1\frac{1}{2}$ inches according to age. The trees will be dug and packed with the utmost care by experienced Nurserymen who thoroughly understand their business.

Our Nurseries contain more than 400,000 trees, a large number of which will be ready for delivery during the coming winter planting season.

In addition to our superior grapefruit, orange and lime trees, we are supplying our patrons with equally good varieties of peach, plum, fig, avocado, mango and pecan trees and grape vines. In ordering these trees you can feel assured that the same high quality, which has always placed our citrus fruit trees in the foremost rank, will be maintained in all of our other trees.

Our Guarantee

We guarantee every citrus fruit tree we ship to be first class Nursery stock. Regardless of kind or variety, every tree shipped from our nurseries is warranted true to name and the highest grade stock that can be produced.

Prices and Terms of Sale

The prices listed with this catalogue are F. O. B. railroad station at either of our nurseries. Always state whether to ship by express or freight.

Terms of Payment

Cash with order, or where trees are ordered reserved for future delivery 10% or more must be paid at the time of placing the order.

The C. E. Thomas Nurseries

About Planting a Grove

Preparation of the Land

Too much importance cannot be attached to the careful preparation of the land for a citrus fruit grove. The ideal way is to remove all stumps, roots and growth of every kind, although a good grove may be successfully grown, especially on high, rolling land where the large stumps are left standing.



A One Year Old Grove

After the clearing is done the ground should be plowed deep and thoroughly disked and harrowed until the ground is thoroughly broken up and level. If the ground is not thoroughly worked the soil remains loose and it will dry out, where if it is in good condition it will hold the moisture.

It is preferable in all cases where it is possible to do so to plant prior to the time of setting out the grove either a crop of velvet beans, or cow peas. If the ground is low and inclined to be sour unless either a crop of cow peas or velvet beans can be raised prior to planting it is often necessary to sweeten the land with lime.

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Time to Plant Trees

Citrus fruit trees may be set in Florida at almost any time of the year when the land is ready and there is sufficient moisture to favor their growth. The preferable time, however, is from November 15th until the latter part of March, or during the rainy season in June. Many authorities advise planting trees in the early Winter after the trees have become dormant, on the theory that the roots will become thoroughly healed and put the trees in condition for a good, vigorous growth early in the Spring. Others claim that the month of February and early part of March is preferable. We do not think any mistake will be made by following either plan, providing that the ground is sufficiently moist, or if it is not the trees must be watered until they become thoroughly set. The main advantage of June setting is, that at that time of the year there is usually plenty of rain so that watering will not be necessary.



**Row of One Year Old Lue Gim Gong
Orange. Sturdy Healthy Trees
enable Us to Guarantee Every
Tree We Ship. See De-
scription on Page 19**

Distance for Planting

The following table shows the number of trees it takes per acre according to the distance apart they are planted:

The various authorities on Citrus fruit growing estimate that trees should be set anywhere from 15 x 15 to 30 x 30. The United States Department of Agriculture in their Bulletin on citrus fruit growing advises

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that large growing citrus fruit trees, such as grapefruit and oranges, should not be set closer than 100 trees to the acre. They state that in small growing varieties, such as Mandarin oranges or limes, should not be set closer than 200 trees to the acre.

Table Showing Number of Trees per Acre according to Distance

Distance apart, feet	No. of trees	Distance apart, feet	No. of trees
1 by 1.....	43,560	15 by 15.....	193
2 by 2.....	10,890	16 by 16.....	170
3 by 3.....	4,840	17 by 17.....	150
4 by 4.....	2,722	18 by 18.....	134
5 by 5.....	1,742	19 by 19.....	120
6 by 6.....	1,210	20 by 20.....	108
7 by 7.....	888	25 by 25.....	69
8 by 8.....	680	30 by 30.....	48
9 by 9.....	537	35 by 35.....	35
10 by 10.....	435	40 by 40.....	27
11 by 11.....	360	45 by 45.....	21
12 by 12.....	302	50 by 50.....	17
13 by 13.....	257	60 by 60.....	12
14 by 14.....	222		

Some authorities advise the setting of trees 30 x 30 which is only 48 trees to the acre. We believe this plan is all right looking far into the future, but it does not take much of a mathematician to figure that in as

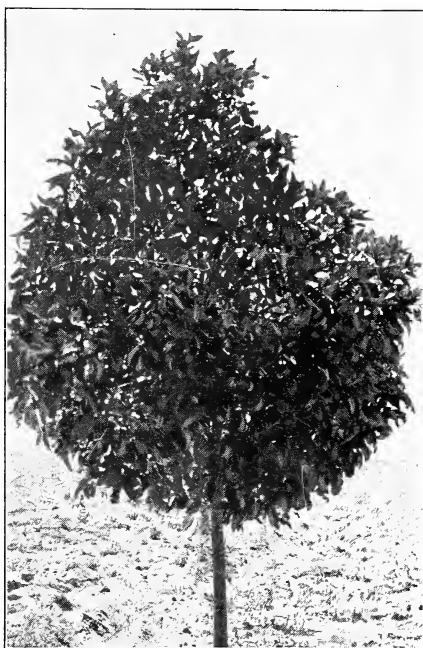


Combination Grape Fruit and Peach Grove

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much as it costs the same to clear and prepare the land and very little extra for fertilizing and care of the grove that a much larger income can be realized the first few years by setting the trees considerably closer together.

Suppose, for instance as an example, a tree at a certain age would produce five boxes of fruit. On the plan of setting 48 trees to the acre, 240 boxes of fruit would be realized where if they were planted 18 x 30, 385 boxes would be grown, making a difference of 145 boxes of fruit per acre, which would mean at say \$2.50 per box for grapefruit, a difference of \$362.50 per acre. Even if the trees were planted 15 x 15 it would, perhaps, be at least five years after the tree commenced to bear before the trees would be large enough to interfere to any material extent with each other.



A Two Year Old Orange Tree

In setting the trees 15 x 15 each acre would contain 193 trees. Figuring on the same plan of five boxes per tree would mean 965 boxes of fruit; figuring the fruit at \$2.50 per box, would amount to \$2,412.50 per acre as against an income of \$560 per acre figuring the same number of boxes per tree in a grove set with only 48 trees to the acre. This would make a difference of \$1,852.50 in the yearly returns of each acre.

Using the above figures as a basis it would seem where a person only has a limited amount of land to start with that it should pay to set the trees fairly close together with the idea of taking some of them up at a later date. It is now a well known fact that trees ten and twelve years old can be removed and transplanted without any serious damage ex-

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cepting the loss of one year's fruit. Taking it for granted that the best distance for an old grove is 30 x 30 if the trees were planted 15 x 30 all of the trees could be left standing for say, from three to five years after the starting of the bearing period. After that time every other tree could be removed which would leave the trees thirty feet apart. During that time figuring on that basis, your income would be double the amount for the first few years.

Summing the matter up our advice is to set the trees either 18 x 30 taking 77 trees to the acre, or 25 x 25 taking 69 trees to the acre, provided that it is the intention of the grower to grow other crops between the trees, or intersperse with peach trees which we strongly advise—as stated elsewhere in our catalogue. On the other hand, we believe that in case one does not care to raise either vegetables or plant peach trees between the rows when the citrus fruit trees are young, no mistake can be made by planting the trees fifteen feet apart with the idea of taking out the surplus trees at a later date.

How to Plant the Trees

As the Florida State law now requires defoliation it is necessary to remove the leaves and it is best in all cases to prune or cut back the trees to correspond with the root system. Unless otherwise instructed all of our trees will be defoliated and cut back at the Nursery. This is much the best plan, besides the trees make a better package and cost less for freight.

When the trees arrive they should be placed in a cool, shady place; or if not to be set for sometime they should be heeled in, but this is not usually necessary as the trees are packed in such a way that they will keep without injury for sometime, especially during the dormant season.

It is not advisable to dig a hole for the trees prior to the time they are planted as the ground should be fresh and damp. The hole should be large enough to admit the roots without crowding. If trees are to be transplanted in June they should be put into the ground as quickly as possible. Care should be taken to keep separate the sub-soil and top soil so that same can be replaced properly in packing in the earth. It is preferable to use only rich top soil in filling in the hole. It should be the invariable rule to pour water in with the dirt so as to pack the ground thoroughly so the roots will be properly set. The growing of the tree may be greatly handicapped by careless setting. Do not throw the dirt back in spadeful, or lumps, but

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sift in carefully so the ground will become thoroughly packed. A careless or hurriedly set tree may be put back several months even though it lives and apparently does fairly well.

After the dirt has been replaced it should be firmly pressed down with the foot taking care not to give more pressure near the root than away from it, as this has a tendency to upturn the roots.

After the dirt has been filled in an elevation should be made around the outer rim of the hole leaving a saucer shaped basin equal in diameter to the root system of the tree into which should be poured two or three gallons of water. After this has settled thoroughly throw the loose earth of



Picking Grape Fruit

The C. E. Thomas Nurseries

the elevated rim in around the tree until level after which it must be thoroughly pressed down by treading.

It is highly important that a tree should not be set deeper in the grove than in the Nursery as in this case the growth of the tree will be retarded. A great many authorities even advise the setting of the tree from two to three inches shallower than it was growing in which case they can be banked at a later period. This is an advantage where trees are set upon somewhat low ground, as ridges can be made which will help in drainage.

Banking the Trees

Many years ago it was many nurserymen's idea to bud the trees from six to twelve inches or more above the ground, but of late years it has become the almost universal practice to bud either at, or as near the ground as possible. This is a much preferable method and all of our trees are budded in this manner. This enables the grower to bank the trees when young which in case of frost would preserve the budded growth. We strongly advise the banking of young trees especially for the first two or three winters to the height of from 12 to 15 inches. The expense is not great and in case of frost the tree can be cut off so that it will preserve the tree and does not seriously retard its growth.

Fertilizing

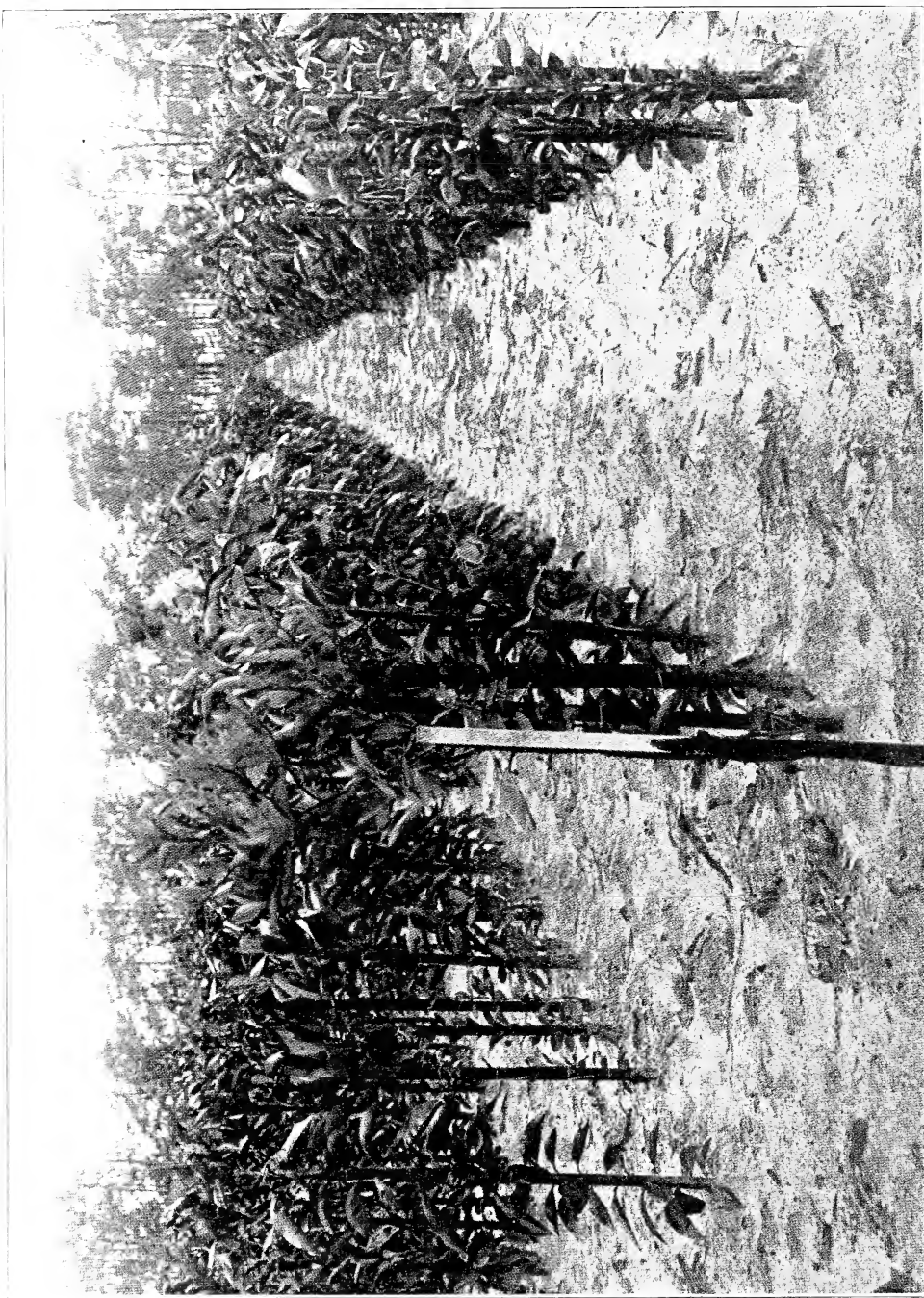
The subject of fertilizing is a somewhat exhaustive one and we advise all growers to purchase some good book on the subject. The various fertilizer companies also furnish pamphlets pertaining to fertilization. It is very frequently more detrimental to a grove to over-fertilize the young trees than it would be if an insufficient quantity were applied. Every fruit grower should give the question of fertilization careful thought and consideration, as the quality of the soil may make considerable difference both as to the amount of fertilizer to be used as well as the formula of it in order to produce the best results.

Authorities differ as to whether it is advisable to use fertilizer when the young tree is set out. If the ground has been properly sweetened either by the raising of a crop of cow peas or velvet beans, or by the use of lime, we do not think it is absolutely necessary to mix any fertilizer with the soil when the tree is set, in which case it is a good plan to wait two or three



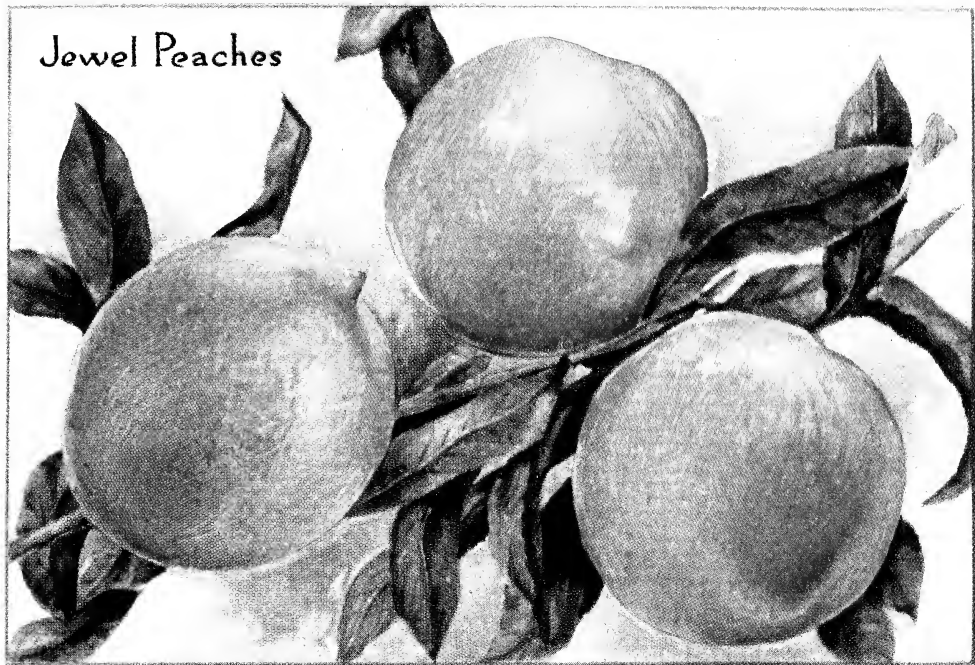
A Ten Year Old Grape Fruit Tree

weeks and then apply about a pound of orange tree fertilizer to each tree raking same in. However, we believe that it is a good idea to mix from tree-fourths to one pound of fertilizer with the dirt when it is replaced around the tree. Many novices make a serious mistake in using too much fertilizer, as a tree can be damaged by applying too much, especially when young.

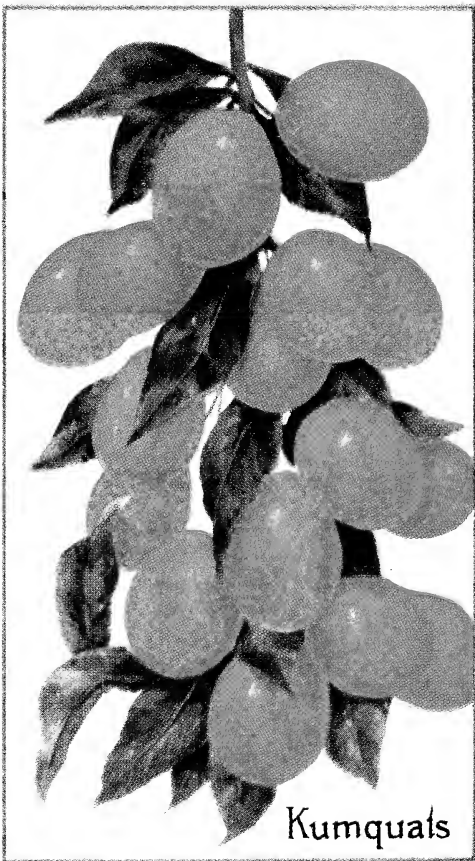


Pineapple Orange Trees at One of Our Nurseries. The Best Early and Mid-season Orange That Can Be Grown. See Description on Page 16

Jewel Peaches



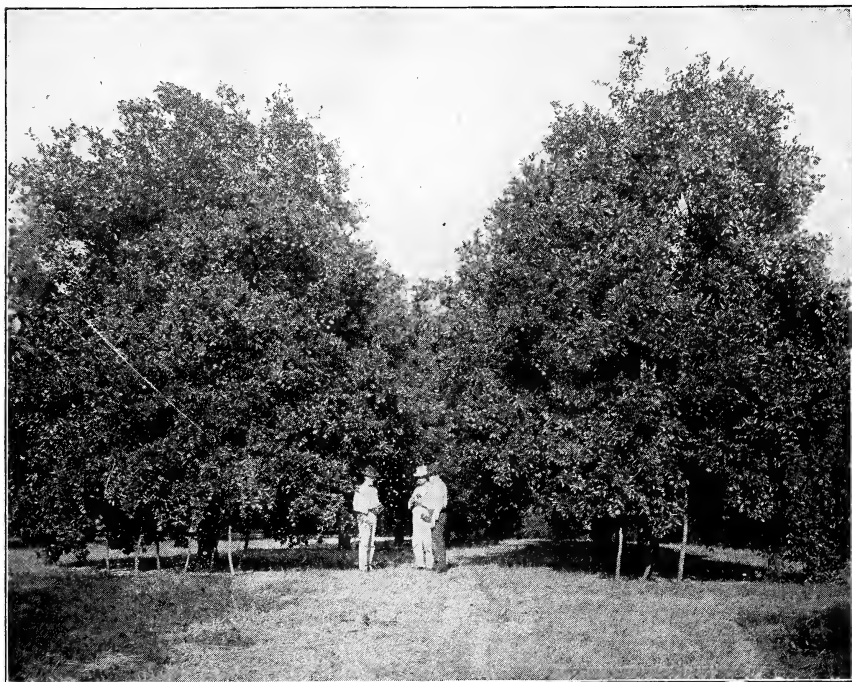
Excelsior
Plums



Kumquats

Oranges, Lemons and Limes

The oranges which are herein listed are all well known and standard varieties. Please note that we have both early and late varieties budded on both sour orange and rough lemon stock. We believe, and it seems to be the opinion of many good Nursery men and U. S. Agricultural experts that the best universal stock for all purposes is the sour orange, but if you are going to plant your trees on high, rolling and a rather light piece of land do not believe you will make any mistake in using the lemon stock. The sour orange stock is unquestionably the best for any land that is inclined to be low and heavy. The sour orange stock is much less liable to disease and has other advantages for planting in this kind of soil.



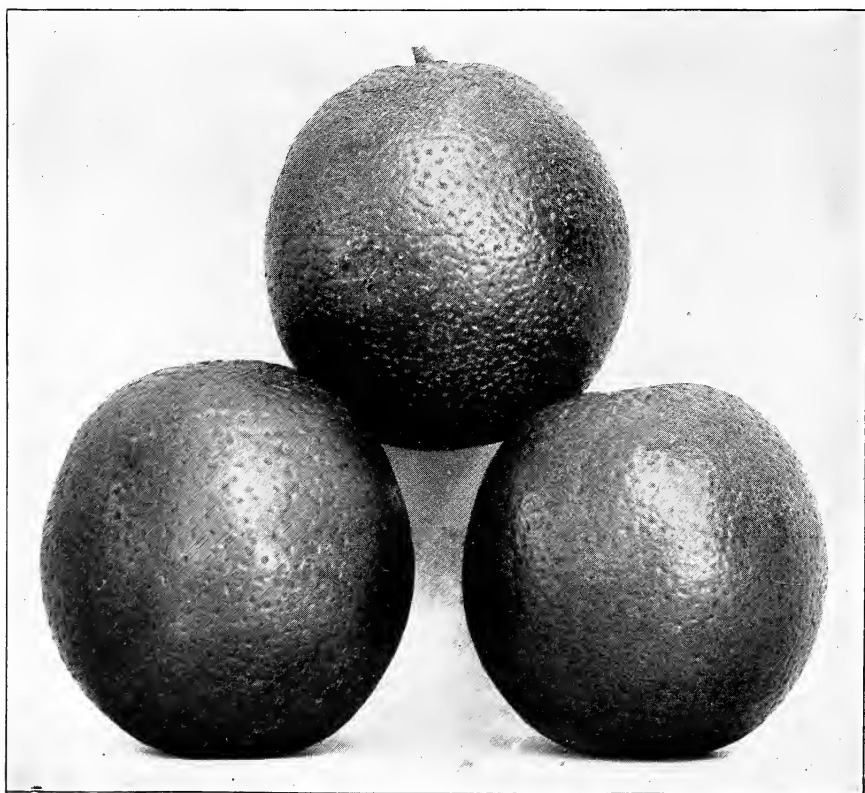
A Twenty-five Year Old Parson Brown Orange Grove

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The following are considered the best paying varieties

Pineapple Orange

This variety is considered by a great many of the best authorities as being the best orange for general culture produced in the state of Florida. It certainly has no equal as an early and mid-season orange. It ripens quite early in the fall—in fact, it colors at about the same time as the Parson Brown, and, therefore, may be classed as a very early variety. Although it ripens early it has the advantage that it can be held on the tree until February and sometimes until March. It is also a fine shipper. Mr. S. C. Inman, of Winter Haven, Florida, who is one of the oldest and best known growers in the state recently made the statement that he considered the Pineapple the best fruit and the most profitable orange grown. The tree is a strong vigorous upright grower and is exceedingly prolific. The fruit



Florida Pineapple Oranges

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is medium to large; the color is deep orange with a reddish tinge; the flavor is rich and spicy; the rind is thin. We strongly recommend the Pineapple as being without question the best early and mid-season orange grown.

Hart's Late or Tardiff

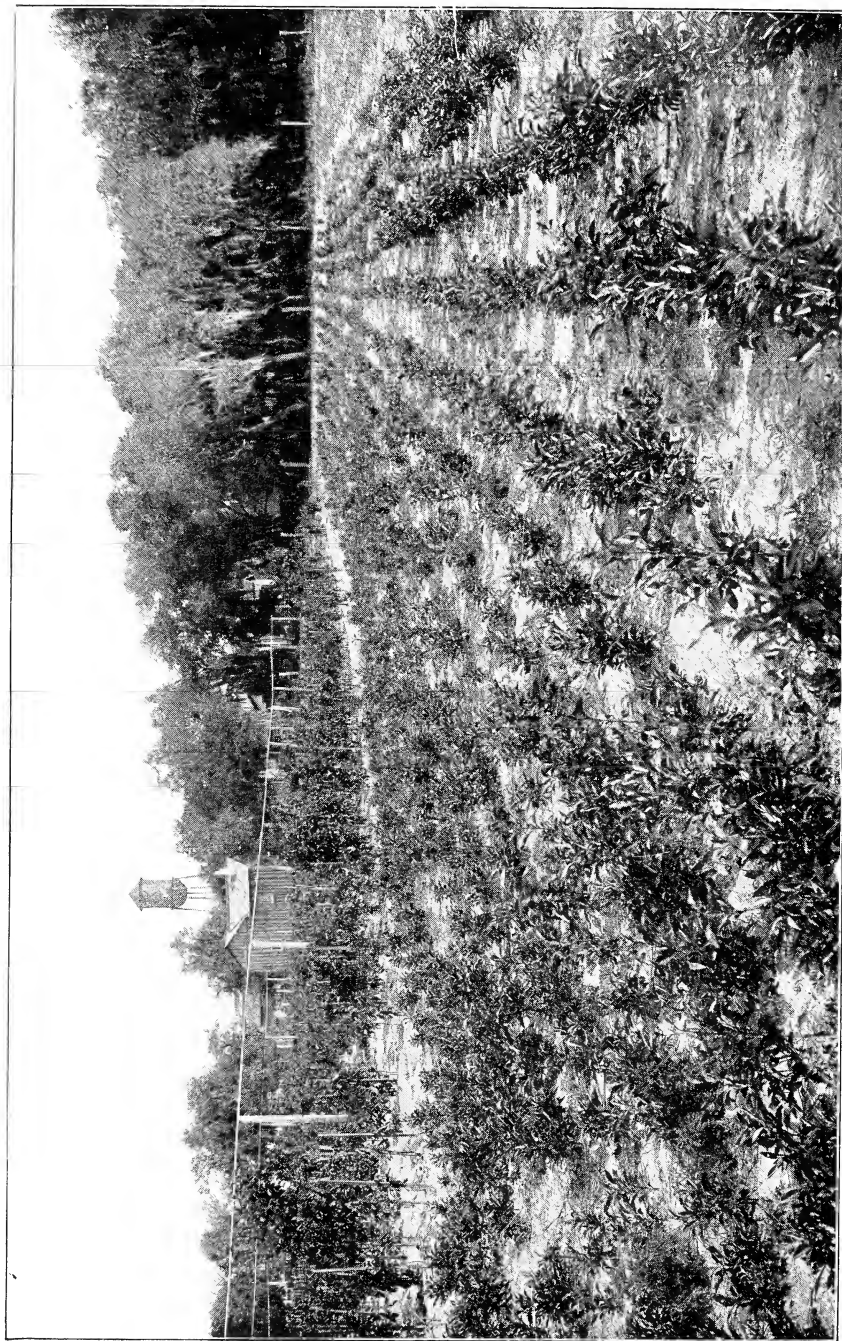
Form round, or sometimes slightly oval; size medium to large; color golden orange; rind smooth, thin and tough; flesh orange in color; juice abundant; acidity and sweetness well combined; pulp melting; flavor rich; excellent quality. It ripens in Florida from the latter part of April to July and is a good keeping fruit. It is a fine handsome fruit and one that brings the best market prices wherever it is offered. The tree is a vigorous grower and a good producer. The advantage of this fruit being that it will remain on the tree in good shipping condition very late in the Spring, or early Summer.

Valencia Late

This orange is one of the very best of the late oranges. It is said by some to have originated from a budded Tardiff. This orange perhaps, carries better and keeps better than any known variety, except perhaps, the Lue Gim Gong. It is a desirable fruit in size and appearance. We consider it one of the very best, if not the best of the late varieties. The trees are of vigorous growth with a few thorns and have dense foliage. They come into bearing two or three years from planting.

The King Orange

The King Orange is the latest-maturing of the Mandarin (sometimes called Kid-glove) group. It is ready for marketing in March and April. The fruit is of large size, flattened, deep orange in color, roughened and pitted on the surface, with a rather thick rind. The flesh is deep orange in color, quality excellent, with a sprightly agreeable flavor in which sweet and subacid are well blended. The tree is an upright grower, with very dark green, shiny foliage. It is very prolific and this, together with its late-ripening season and high quality of fruit, have combined to make it a very profitable variety. It always commands a high price in the markets. In any mixed orchard it is well worth planting, and it has a place in every home grove. This view of citrus fruit culture is very often overlooked. Attention is so often given solely to the commercial thought that we lose sight of fruits to be grown for home use, and which add so much to the comfort and joy of living.



View Showing First Growth of Citrus Fruit Stock From the Seed. When Trees Reach Proper Height They Are Budded

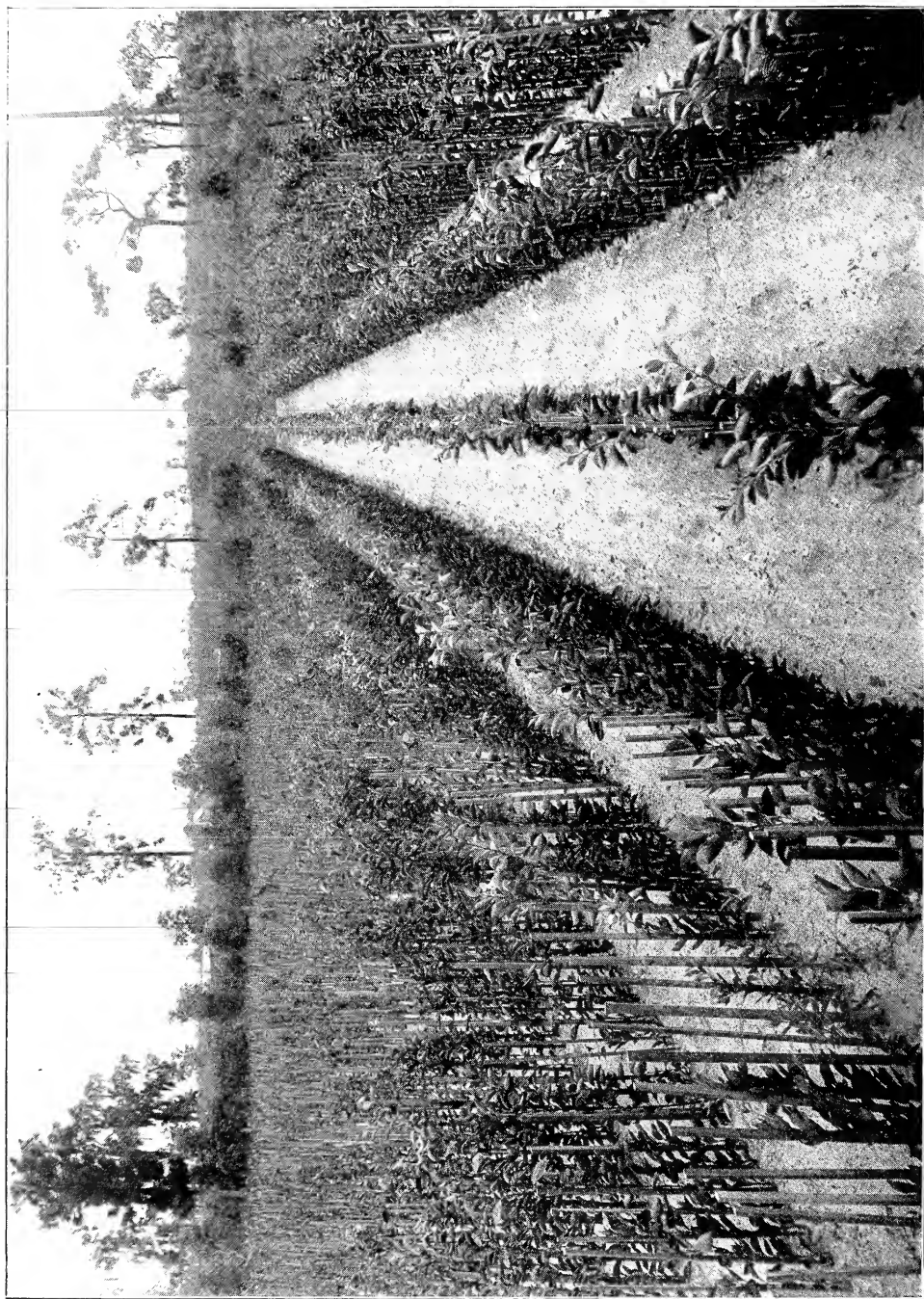
Lue Gim Gong Orange

A late orange said to have special merits as to the hardiness of the tree and the late keeping qualities of the fruit. This variety was originated at Deland by Lue Gim Gong. The introducers claim the tree to be more hardy and vigorous than other late varieties. Also that the fruit will hang on the tree in good condition considerably longer than other late varieties. The fruit reaches full maturity in July and August and it is claimed to hang on the trees throughout the entire Summer and Fall and that oranges have been known to remain on the trees in good condition for 24 months. Size medium to large; color deep orange red; rind thin and smooth; flesh deep orange; juice abundant, even in fruit a year or more old; comparatively few seeds. If this fruit is all that it is claimed to be and proves a good producer, it is the equal, if not the superior of any late orange.

Tangerines

This orange belongs to the Mandarin family and is known as the kid glove orange. The color is deep orange red; size small to medium. A well known characteristic of this orange is that the rind separates easily from the flesh; flavor rich; very juicy; comparatively few seeds. The tree is prolific and is a vigorous grower. This orange has a good sale and we advise all purchasers to include at least a few of these trees.

We are budding to the Dancy tangerine altogether as we believe it to be much the best variety.



Valencia Late Oranges in the Foreground. Mandarin and Tangerine Oranges on the Left. Every Tree is Carefully Trained to Straight Growth by Supporting Stakes

The Lime Industry in Florida

There are today, comparatively few growers raising limes and therefore it should appeal especially to those who contemplate planting new Citrus groves where the land is well protected.

Comparative Bearing Age

Other citrus fruits such as oranges, grapefruit, tangerines, etc., do not bear commercial crops until the fourth to fifth year from planting. Lime trees will begin to bear a commercial crop in two years and increase their production rapidly.

Difference in Number of Trees Set to The Acre

The best authorities agree that the proper number of grapefruit and orange trees to set to the acre for a permanent grove is from 69 (which is 25x25 feet apart) to 77 (which is 30x18 feet apart). Lime trees being considerably smaller in size when fully matured can easily be set from 200 to 300 trees to the acre. The following table gives the various distances and number of lime trees which should be set to the acre:

12 x 12 feet.....	302 trees
14 x 14 feet.....	222 trees
15 x 15 feet.....	193 trees
20 x 20 feet.....	108 trees

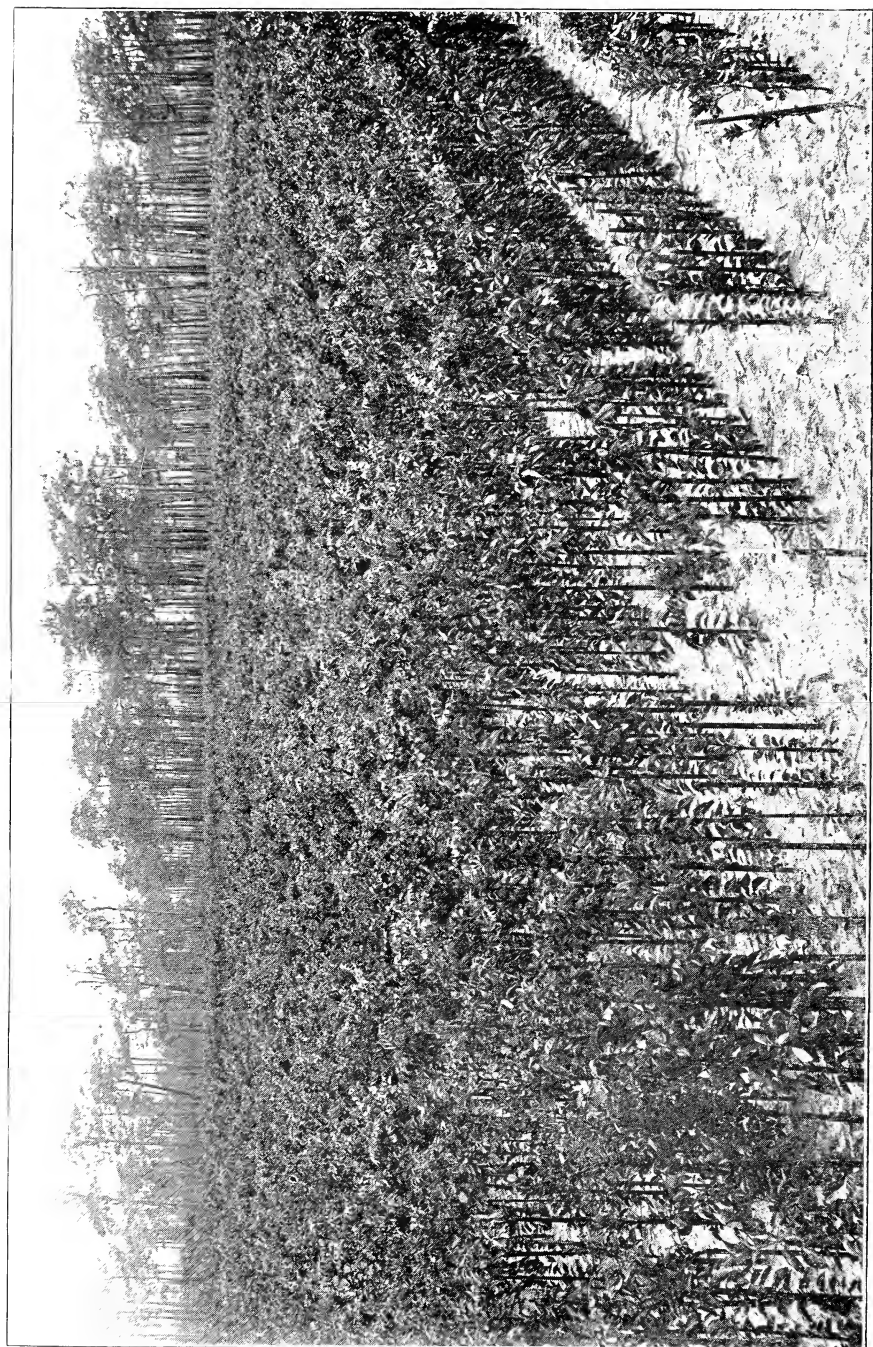
We do not recommend planting limes further apart than 15x15 feet unless peach trees are to be planted between the rows.

Mexican Lime

The form of the Mexican Lime is somewhat oblong or oval. Size, small; color, light lemon yellow; rind, smooth and thin; oil sacks, numerous. The flesh is fine grained, of light yellowish green in color. The juice is plentiful and is practically colorless. The pulp is melting and of a very strong acid flavor, distinctly lime. The Mexican Lime contains very few or no seeds. This lime ripens all the year round. The tree grows from 10 to 15 feet high. Some growers consider the Mexican Lime the best market variety on account of its keeping qualities, although it is not as handsome a fruit as the Tahiti.

Tahiti Lime

The form of the Tahiti Lime is broadly oval. Size, large; color, lemon yellow; rind, smooth and thin; flesh, fine grained, greenish in color, juice plentiful, practically colorless, pulp melting; acid pure, with strong agreeable flavor, practically seedless; season, fall and winter. The Tahiti lime grows as a round top tree 10 to 15 feet in height. Fruit is produced singly or in clusters of two and three, usually well covered by foliage.



General View in One of Our Nurseries Which Shows the Young and Smaller Trees in the Foreground

Grapefruit or Pomelo

We list only the best selling varieties.

It is a well known fact that the best grapefruit sold in American markets is produced in Florida. California seems unable to produce a fruit which will compare favorably with that grown in Florida. The demand for grapefruit is increasing very fast and we advise everyone who is going to raise a fair sized grove to plant at least half of same in this popular fruit.

The grapefruit trees which we list are all standard and no mistake can be made in ordering any of the following varieties either for home use or commercial purposes.

Excelsior Late

This is one of the very best varieties of late grapefruit produced in Florida. It is a fruit of good color and of fair size running from medium to large. It has a bright yellow, smooth, tough skin. It is a late variety and can be shipped safely until June and July. This fruit was propagated by C. M. Marsh at Fort Mead, Florida, in 1891 and has been one of the most popular late grapefruit since that time. We heartily recommend this as one of the two or three best varieties of grapefruit for general planting.

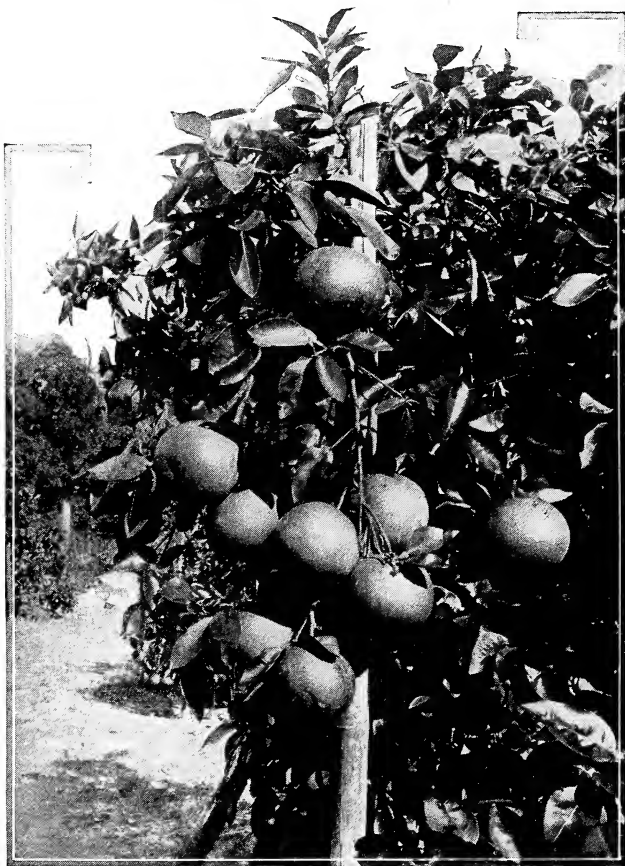
Hall's Silver Cluster

This is a very popular variety of fair size, ranging from 4 to 4 $\frac{1}{8}$ inches and larger. Color light yellow, but slightly darker than that of most grapefruit; acidity and sweetness well marked; juice almost transparent; season from February to March. A good, medium grapefruit for general planting and one that brings a good market price.

Walters Grapefruit

Walters is one of the standard varieties of grapefruit and is considered by some growers to be the best all around grapefruit grown. It is very similar in appearance to Hall's Silver Cluster excepting that it does not have the tendency to form in clusters. It is of just about the right size for shipping. We strongly recommend Walters as being one of the very best varieties for those who are planning a commercial grove. Form, oblate; size, medium, approximately 3 $\frac{3}{4}$ by 4 $\frac{7}{8}$ inches; color, pale yellow; rind, smooth; acidity and sweetness good; quality, very good. Season, medium late.

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Marsh Seedless Grape Fruit Tree

Marsh's Seedless

This is a grapefruit of good form, color and quality and is at the present time a very popular fruit on account of the fact that it is seedless. We believe it is a good variety for planting, as there is an increasing demand for seedless grapefruit. It is of medium size. On account of being seedless is popular with hotels, restaurants and is sure to be in continued good demand. It is a late prolific variety and we advise all who are raising a grove for commercial purposes to plant a fair quantity of this fruit.

Mangos

The Mulgoba Mango is medium to large in size, ranging in weight from four to twelve ounces. In shape it is slightly oblong, marked with a small protrusion at the blossom point. The color is a deep golden yellow with a rich bright carmine on the side exposed to the light, fading into delicate pink tints dotted with very small brown spots. The skin is smooth and thin, but firm. Flesh is a rich golden yellow color, being tender, melting, sweet and delicious, with delicate, spicy, perfumed aroma. Fiber is short and coarse, extending only from the thin edges of a medium small and even seed. In quality, the Mulgoba is considered the very best Mango that has ever been propagated. It can be easily separated in halves and the seed extracted without leaving any fiber in the pulp, which can be eaten with a spoon or skin removed and eaten the same as a peach or pear. It ripens in July and is in season during the summer months. There are many inferior varieties of Mango trees, the fruit of which has no commercial value. Do not make a mistake in the selection of your trees. The Mulgoba is one of the very few choice varieties grown. It is no doubt the most popular and should find a large and ever-increasing market throughout the United States.

The Haden Mango is a seedling from the Mulgoba, and is very highly prized by some growers, as being almost identical with the Mulgoba. It averages handsomer in appearance, a more reliable bearer, and almost as good in quality. Tree is also an exceptionally vigorous grower. This is the main standby for commercial planting.

Prices of Mangos Packed Singly in Wooden Boxes

	Each	10	100
1 to 2 feet size—2-year old.....	\$1.50	\$14.00	\$125.00
2 to 4 feet size—3-year old.....	2.00	18.00	150.00

The C. E. Thomas Nurseries

Paper Shell Pecans

The culture of the paper shell pecan has proven to be highly profitable in the Gulf Coast States. While it is being extensively grown in a number of the southern states, there are still comparatively few commercial groves, when we consider the enormous demand for this nut.

In flavor the paper shell pecan is undoubtedly the most delicious nut grown, and it is considered by all authorities to be by far the most nutritious.

The meat of the paper shell pecan is very large and easily removed from its thin shell.

The demand has always exceeded the supply, and consequently the pecan has enjoyed the prestige of being the highest priced nut on the market. On account of its great food value, its popularity will unquestionably increase constantly and these nuts should always demand top prices in all markets regardless of the quantity that may be produced.

Number of Trees per Acre

For a commercial grove, pecans should be planted 16 to 20 trees to the acre. Eighteen trees per acre or 45 x 60 feet apart is considered the ideal planting. When planted in this manner, other crops can be easily cultivated between the rows of trees without detriment to the trees or their future production. Peach and plum trees have also been found a profitable combination with pecans, as a large number of these smaller trees can be planted between the rows which should yield a nice income before the pecan trees are old enough to bear.

While the pecan tree does not usually begin to produce crops on a commercial scale until the eighth year after planting, the tree will continue to grow from year to year producing an ever-increasing revenue, which in time becomes very substantial.

We offer only the most select and proven varieties of the paper shell pecans. They are all budded from bearing trees and are, therefore, guaranteed to be positively true to name.

Big Z Variety

The Big Z is a new variety and gives every indication of being the finest and largest pecan nut that has ever been propagated. The original tree was grown in the grove of Mr. J. W. Zink, in southern Mississippi.

This tree is exceedingly sturdy, produces a heavy foliage, making a very beautiful tree.

The Big Z is one of the early bearing varieties and larger than any other paper shell pecan known. It is an extremely heavy producer and has a record of bearing one-third more nuts than any of the best known standard varieties, which have been produced in the past.

The size is very large, averaging 38 to 40 nuts to the pound. Nuts grow in clusters of three to five. The shell and partitions are thin, and in appearance is considered superior to any nut on the market. The meat is rich, deep yellow in color and crisp. It has a most excellent flavor and cracking qualities are extraordinarily good. We believe that every grower of the Big Z Pecan will not only be more than satisfied with the productiveness of these trees, but will also receive the greatest possible returns from pecan growing.



Big Z Pecan

Prices of Big Z Variety

Grade	Each	10
2 to 3 feet	\$1.25	\$12.00
3 to 4 feet	1.35	13.00
4 to 5 feet	1.60	15.50
5 to 7 feet	2.50	25.00

The C. E. Thomas Nurseries

President Pecans

The President pecan has a most excellent reputation. The parent tree produced six years after planting in grove form, and the yield has steadily increased until it is today considered one of the best bearing nut trees to be found anywhere. We consider it one of the most perfect nuts of the pecan family. Undoubtedly one of the best of the older varieties; oblong shape with sharp pointed base.

The meat is bright golden yellow, flavor extremely rich and pleasant.



President Pecans

Stewart Pecans

The Stewart is among the very choicest varieties of pecans, as well as being one of the oldest named varieties known. The nut is somewhat shorter than the President and ovoid in shape. It has a thin shell, plump kernel of very excellent quality. It is one of the most popular varieties; the tree is a vigorous, upright grower and considered one of the very best producers.

It is a standard nut and will always be in good demand.



Stewart Pecans

Prices of the President and Stewart Pecans

Grade	Each	10	100
1½ to 2 feet—Small.....	\$0.90	\$ 8.00	\$ 75.00
2 to 3 feet—Light.....	1.00	9.00	80.00
3 to 4 feet—Medium.....	1.20	11.00	100.00
4 to 5 feet—Standard.....	1.50	13.00	120.00
5 to 7 feet—Large.....	2.00	17.50
7 to 9 feet—Extra large.....	3.00	27.50

Figs

With the ever increasing demand throughout the North American Continent for fancy fruits, the growing of figs should prove even more profitable in the future than it has in the past. Both fresh and the preserved figs have an extensive sale in many northern markets, where, a few years ago, they were practically unknown. Fig trees do well and bear regularly and continuously in practically all the southern states. It is unquestionably a fruit of great merit, and we believe that those who take up its culture actively and along commercial lines will find it one of the most profitable means of agriculture. Even small orchards of a few trees have been known to produce a splendid income, especially when the small amount invested is taken into consideration.

The trees are low price, easy to plant and care for and begin producing a good income from two to three years after planting. Fig trees are usually planted 193 to the acre, 15 x 15 feet apart.



Celestial Figs

The C. E. Thomas Nurseries

Celestial Fig

This fig, illustration of which is shown herewith, is considered the best of all varieties for general use, especially for eating fresh. It is being extensively planted throughout the Gulf States east of the Mississippi, and has exceptionally fine qualities for preserving and canning.

It is small to medium size, bluish and ivory yellow in color, and a very hardy fruit. Ripens in June.

Brunswick Fig

The Brunswick fig is an exceptionally large fruit with thin skin. The flesh is generally white, shading to a rich pink color toward the center. This fruit is quite juicy and has a sweet flavor. The meat is firm and of very excellent quality. The tree is a rapid grower and very productive, fruit ripening the first season after planting. Growers will make no mistake in planting the Brunswick.

Brown Turkey Fig

This is one of the very best of the standard varieties of figs and trees bear some fruit the second year, increasing rapidly in production. Size is medium to large and the color yellowish brown with a slight tinge of pink. The skin is very thin but quite strong and tough. Flesh is creamy white shading to pink. It has a delicious rich flavor of the best quality.

The stem of the fruit is quite long; the blossom end pointing downward at maturity, which prevents souring in case of rainy weather.

The Brown Turkey variety is considered one of the most profitable for large commercial plantings, and is a splendid fig either for marketing as fresh fruit, canning or drying.

Price of Fig Trees

	Each	10	100
1 to 2 feet, light.....	\$0.30	\$2.50	\$20.00
2 to 3 feet, small.....	.40	3.50	30.00
3 to 4 feet, medium.....	.55	5.00	45.00
4 to 5 feet, standard.....	.75	6.50	55.00

Florida Peaches

While we advise the growing of citrus fruit trees in preference to peaches, we believe that by planting the varieties which we list herein, which are especially adapted to Central Florida, that a peach grove will be a profitable and good paying investment.



Hillsboro County Peach Grove, 5 Months Old. Picture of Same Grove Shown on Next Page, Taken at 17 Months Old.

Taking into consideration the fact that a peach tree will produce fruit in from one to two years it is a splendid supplementary crop to bring an income in while you are waiting for the Citrus Fruit trees to come in to bearing.

Ordinarily speaking the life of a peach tree is from 5 to 8 years, although the trees which we sell which are budded on wild plum stock will live on an average much longer.

We strongly advise those who plant a citrus fruit grove and who do not intend to raise other crops between the trees to plant peach trees between the rows using the same number as are planted to grapefruit and oranges. These trees will have outlived their usefulness and may be removed before they interfere to any extent with the bearing of the citrus fruit grove.

The C. E. Thomas Nurseries

The trees are not expensive and there is no additional expense for clearing and the added expense for setting, and fertilizing is not heavy.

The three varieties we list as stated above are budded on wild plum stock and are supposed to be absolutely immune from root diseases which



17 Months Old Peach Grove. Same Grove as Shown on Preceding Page, Showing Growth Made in One Year.

are common to peach trees budded on peach stock. Do not make the mistake of buying peach trees budded on peach stock.

Jewel

Medium to large; roundish oblong; highly colored, red on exposed parts; flesh yellow, red about pit; juice melting, excellent quality; free stone. The tree is very vigorous and healthy and is a good producer. Claimed to be one of the best available marketing varieties for central and southern Florida. It is very early.

Hall's Yellow

Large size, nearly round; color yellow washed with red; flesh yellow; red stone from which flesh parts freely; quality good. Ripens from middle to latter part of June.

T a m p a ::: ::: ::: F l o r i d a

Angel Peach

Large, round and slightly pointed; color yellow tinged with red; very handsome; flesh white, sweet and melting; juice sub-acid of exquisite flavor; free stone. The tree bears while very young and is very prolific. It blooms quite late, thus escaping injury from early frosts. The fruit ripens early but not as early as the Jewel.

Early Florida Plums

To those who desire to plant one of the best varieties of plums either for home use, or commercial purposes, will say that we have a limited supply and can furnish as long as they last, the Excelsior Plum. We believe this to be without any doubt one of the very best varieties for Florida planting. The tree is a remarkably strong grower. Fruit medium, averaging from one to one and one-fourth inches in diameter; nearly round, color reddish purple, with heavy bloom; flesh yellow, reddish near pit. Ripens in May.

Prices of Plums and Peaches on Peach Roots

	Each	10	100
2 to 3 feet, small size.....	\$0.35	\$ 3.00	\$ 25.00
3 to 4 feet, medium size.....	.50	4.50	40.00
4 to 5 feet, standard size.....	.60	5.50	50.00
5 feet up, large size.....	.75	7.00	65.00

Prices of Peaches on Plum Roots

	Each	10	100
to 3 feet, small size.....	\$0.50	\$ 4.00	\$ 35.00
3 to 4 feet, medium size.....	.65	5.50	45.00
4 to 5 feet, standard size.....	.80	7.00	60.00
5 feet up, large size.....	1.00	8.50	85.00

The C. E. Thomas Nurseries

Grape Culture in Florida

While Florida has for a great many years produced a considerable amount of grapes, especially of the Scuppernong variety, it is only during the past few years that good varieties of bunch grapes have been propagated that seem especially adapted to the soil and climatic conditions of Florida.

We believe that we can safely recommend our customers to plant any of the varieties we have listed with the idea that they will do well on any average Florida soil where it is moderately well drained.

Successful crops of grapes have been grown on ground ranging from the lightest sandy soil to the heaviest of muck.

With proper care, plants have often yielded from 4 to 8 pounds 18 months and 2 years from planting and there are instances where single plants have yielded more than 20 pounds, which would mean about a ton of grapes per acre under favorable conditions. At the wholesale price of 20 cents per pound this would mean more than \$400.00 per acre.

No investment in nursery stock can be made to bring as quick and substantial returns as an investment in Grape Vines.

Varieties of Grapes

Adapted Coal.—Cluster medium to large with large berry, black, thin skin, superior to Concord, very prolific grower, an excellent all-purpose grape, does best with hot, dry weather.

R. W. Munson.—Strong growth, cluster medium to large, often shouldered, berries medium to large, black without bloom, skin tough never cracks, pulp tender, better than Concord, gives good satisfaction on market.

Ellen Scott.—Very handsome table and market grape, cluster large to very large, berry large, translucent, violet, covered with delicate bloom; skin thin and tough, pulp tender, very high quality.

Adapted Armalaga.—Vine vigorous and healthy, flower perfect, large compact cluster, large yellowish-green berry, excellent shipper.

Florida Malaga.—Rampant grower, heavy bearer of large clusters of large white translucent berries, very hardy, superior to foreign grapes.

Special Adapted Carmen.—Vigorous grower, very prolific, large cluster, compact and shouldered; medium black berries with thin bloom; tough, thin skin, never cracking, meaty and firm pulp, tender when fully ripe, of pure rich quality, much superior to Concord, the best all-purpose grape grown in the south.

Bronze Scuppernong.—Large bronze berry, strongly recommended for its good growing and bearing qualities.

T a m p a ::: ::: ::: F l o r i d a

✓ **Adapted Tender Pulp Scuppernong.**—Sweetest and best of these large black grapes, very prolific yielder and grower. If you have but one arbor grape this is the one to plant. Hundreds of quarts of fine luscious grapes may be picked from one vine; pulp sweet and tender and skin not so thin or tough as others. Yields ripe fruit for a long time.

Prices of Grapes—All Varieties

	Each	10	100
1 year, small.....	\$0.40	\$3.50	\$30.00
2 year, medium.....	.55	5.00	45.00
3 year, large.....	.75	6.50	55.00

Prices of Grapefruit, Oranges, Lemons, Limes and Tangerines

All standard varieties of citrus fruit trees on rough lemon and sour orange roots as listed in catalog, except Tangerines and King Oranges.

	Each	10	100	1000
2 to 3 feet (sold by height only).....	\$0.70	\$6.00	\$55.00	\$500.00
½-inch caliper.....	.85	7.00	65.00	600.00
⅝-inch caliper.....	1.10	8.00	75.00	700.00
¾-inch caliper.....	1.40	11.00	100.00	900.00
Two-year buds, 1-inch caliper.....	1.65	13.50	125.00	1,150.00

Tangerine and King Orange Trees on Rough Lemon and Sour Orange Roots

	Each	10	100	1000
½-inch caliper.....	\$1.10	\$8.00	\$75.00	\$700.00
⅝-inch caliper.....	1.30	10.00	95.00	900.00
¾-inch caliper.....	1.50	13.50	125.00	1,150.00
Two-year buds, 1-inch caliper.....	2.75	26.00	250.00	2,250.00

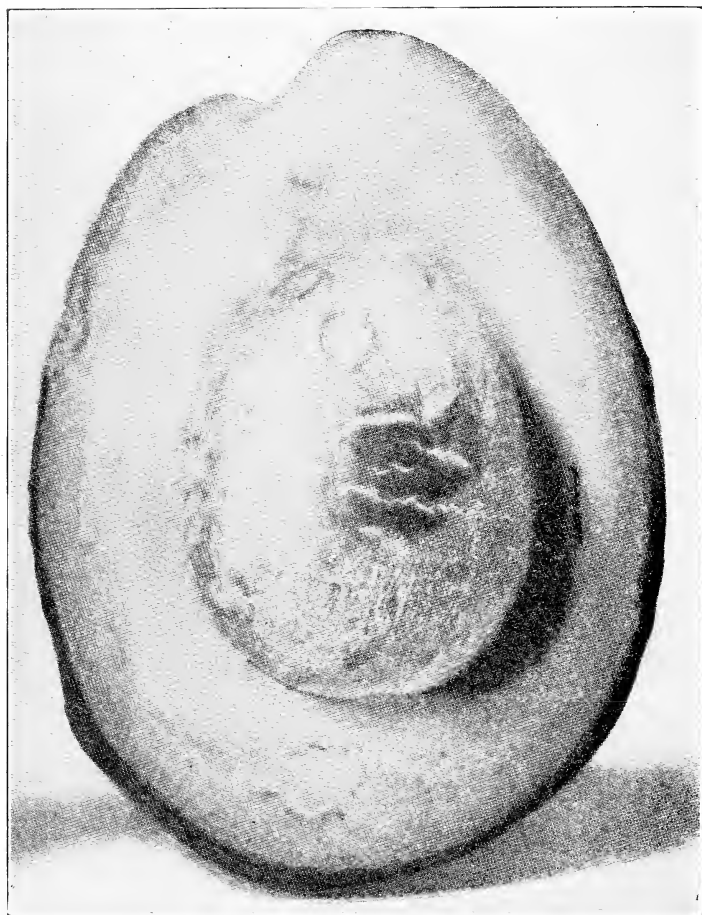
When a total of 500 trees are ordered, 1000 rates apply.

All trees are cut back and defoliated when being shipped.

Avocado Trees—All Varieties

	Crated
12 to 18 inches, in boxes.....	\$2.00 each
25 or more, 12 to 18 inches, in boxes.....	1.85 each
50 or more, 12 to 18 inches, in boxes.....	1.75 each
100 or more, 12 to 18 inches, in boxes.....	1.50 each
	Uncrated
1000 or more, 12 to 18 inches, in boxes.....	\$1.25 each

NOTE:—The above price on thousand lots of Avocado trees is where they are shipped in box cars, where it is not necessary to crate them; or where the purchaser transports them from the Nursery. If it is necessary to crate them, an additional charge of fifteen cents (15c) each will be made.



FUERTE AVOCADO

AVOCADOS

To residents of Florida, the Avocado, commonly referred to as the Alligator Pear, requires no introduction. It is conceded to be the aristocrat of fruits and has undoubtedly the greatest future of any fruit grown in America. The demand so exceeds the supply at present that even summer-bearing varieties command high prices.

The winter-bearing varieties bring fancy prices and are considered the highest priced fruits grown in this country.

Avocados are usually planted from 69 to 108 trees to the acre and begin bearing marketable crops in 3 to 4 years, after planting. Within a few years, the average trees generally produce several hundred fruit annually. At Dunedin, Florida, Mr. B. C. Bass has an Avocado tree over 50 years old, which has produced 2,000 fruit annually for a number of years.

An Important Food

As far as horticultural research shows the Avocado surpasses any known fruit in food value, as its fat or oil content ranges from 16 to as high as 30 per cent. The meat is firm, dull yellow in color, blending to a greenish yellow at the skin. It has a distinctly individual flavor, being rich and creamy to the taste. While many persons enjoy eating it as a fruit, it is more popular as a salad.

As there are only two states in the Union, namely Florida and southern California, where the Avocado can be grown on a commercial scale, it is safe to assume that there will never be an over-production of Avocados. Their popularity with the northern people is growing tremendously every year, and it is doubtful if a sufficient number of trees can be planted for many years to come to take care of the rapidly increasing demand. Any one planting a few acres should feel reasonably certain of large profits from this truly wonderful fruit.

Profits

The most remarkable record which has been made by a commercial planting of budded trees is that of J. T. Wheedon at Yorba Linda. Wheedon's planting of the Fuerte variety, containing fifty trees (less than one acre), produced a crop of fruit, when five years old, which sold for \$1,700.00.

The C. E. Thomas Nurseries

Mr. H. A. Woodworth of Whittier, California, no doubt owns the most wonderful Avocado tree in the world. This tree has brought Mr. Woodworth an income of over Three Thousand Dollars in a single year. This income was partly derived from the sale of the fruit and partly from the sale of budwood. Other single trees in California have been known to yield in the neighborhood of from four to five thousand fruits per year.

In regard to the age at which Avocado trees will pay a profit—budded trees of some varieties, planted from boxes when about six months old from the seed, should bear a profitable crop in three years and will sometimes bear some fruit at two years from planting.

Races of the Avocado

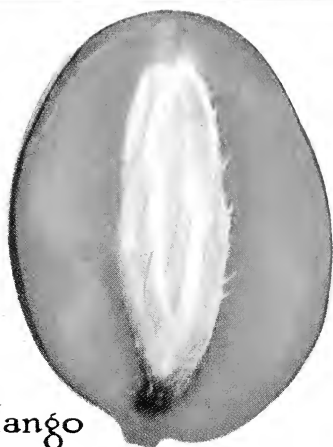
Practically all of the Avocados cultivated in the United States belong to three well-defined races, viz.: the West Indian, the Guatemalan and the Mexican. Two varieties, viz., the Fuerte and Pueblo, are supposed by some Avocado experts to be hybrids of the Guatemalan and Mexican races. Their characteristics are, however, predominantly Mexican as regards their hardiness and from the fact that the leaves have the Anise scent.

The West Indian

This race is the most tropical. The appearance is similar to the Guatemalan having, however, somewhat smaller leaves closer together on the branches. The fruit varies in shape from round to oval and pear-shaped and in color from green to maroon and dark purple. The skin is somewhat leathery but is not so thick as that of the Guatemalan. The fruit is somewhat larger than the other races but the seed is large as compared to the size of the fruit.

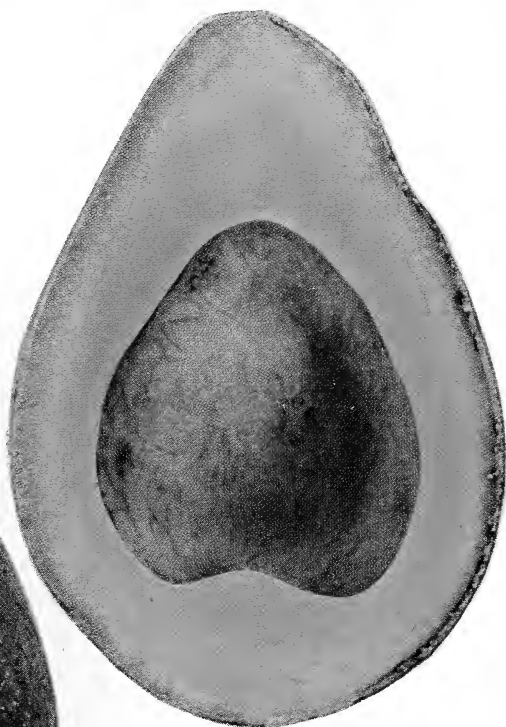
The West Indian is the most susceptible to frost of any of the races and should be planted commercially only in the warmer portions of Florida or in especially well protected places. It will stand about as much cold as the Lime.

The fruit matures from July to November, some pears often remaining on the trees a month later.



Mulgoba Mango

TWO-THIRDS NATURAL SIZE



The Avocado
(Alligator Pear)

T a m p a :: :: :: F l o r i d a

The Guatemalan

The Guatemalan is a much hardier race than the West Indian. The varieties now being grown in California and Florida were imported from Guatemala and Mexico, mostly from high elevations where the climate was somewhat severe.

Wilson Popenoe was sent by the United States government to Guatemala on which trip he obtained many varieties. E. E. Knight of Yorba Linda, California, also made a special trip to Guatemala and brought back some splendid hardy varieties viz.: the Linda, Queen and Knight.

The fruit of the average Guatemalan type averages from 16 to 20 ounces although some varieties often produce fruits weighing as much as three pounds. The skin is thicker and more leathery than that of the West Indian and it is a better shipper. The seed is smaller and fills the cavity as a rule. In shape the Guatemalan varies from round to oval and pear-shaped and like the West Indian in color from green to maroon and purplish black. The fruit ripens from late in October to June in Florida.

The Mexican

The Mexican type of the Avocado is the hardest of them all. It will stand as much or more cold than the average Orange and can be planted commercially throughout Central and even, in well protected places, in North Florida.

Large trees of this variety are bearing fruit as far north as Gainesville. While the fruit is not as large as a rule as that of the other races, there are exceptions and the quality is good.

The weight of the Gottfried, a true Mexican type introduced by the U. S. Government, is about a pound, while the Pueblo often weighs eight to ten ounces and it is recommended by the California Avocado Association as being one of the five best varieties, regardless of race, to plant commercially.

The San Sebastian is also a fruit of fair size and is a remarkably thrifty and fast growing tree and very hardy.

As regards the hardness of various races the Guatemalan will stand about four or five degrees more cold than the West Indian, and the Mexican three to four degrees more than the Guatemalan.

The above estimate is based on reports made to the California Avocado Association by a large number of growers of a freeze in California in 1917. The thermometer showed as low as nineteen degrees of cold which only scorched the leaves and young tender growth of most Mexican trees. The Fuerte was also reported as one of the most hardy.



QUEEN AVOCADO

Varieties of Avocados

West Indian

Trapp.—Matures so it may be eaten about November first, but hangs on the tree so the main crop is marketed in December, when prices are high.

Nearly round in shape, of excellent quality and flavor, exceptionally good shipper and keeper, bearing young, and enormously productive, this is the variety for general commercial planting in warm or well protected places only.

Pollock.—Ripens in August and September. Weight, 2 to 4 pounds, sometimes 5 pounds; seed small; color green; pear-shaped with a thick neck; flavor very rich and nutty.

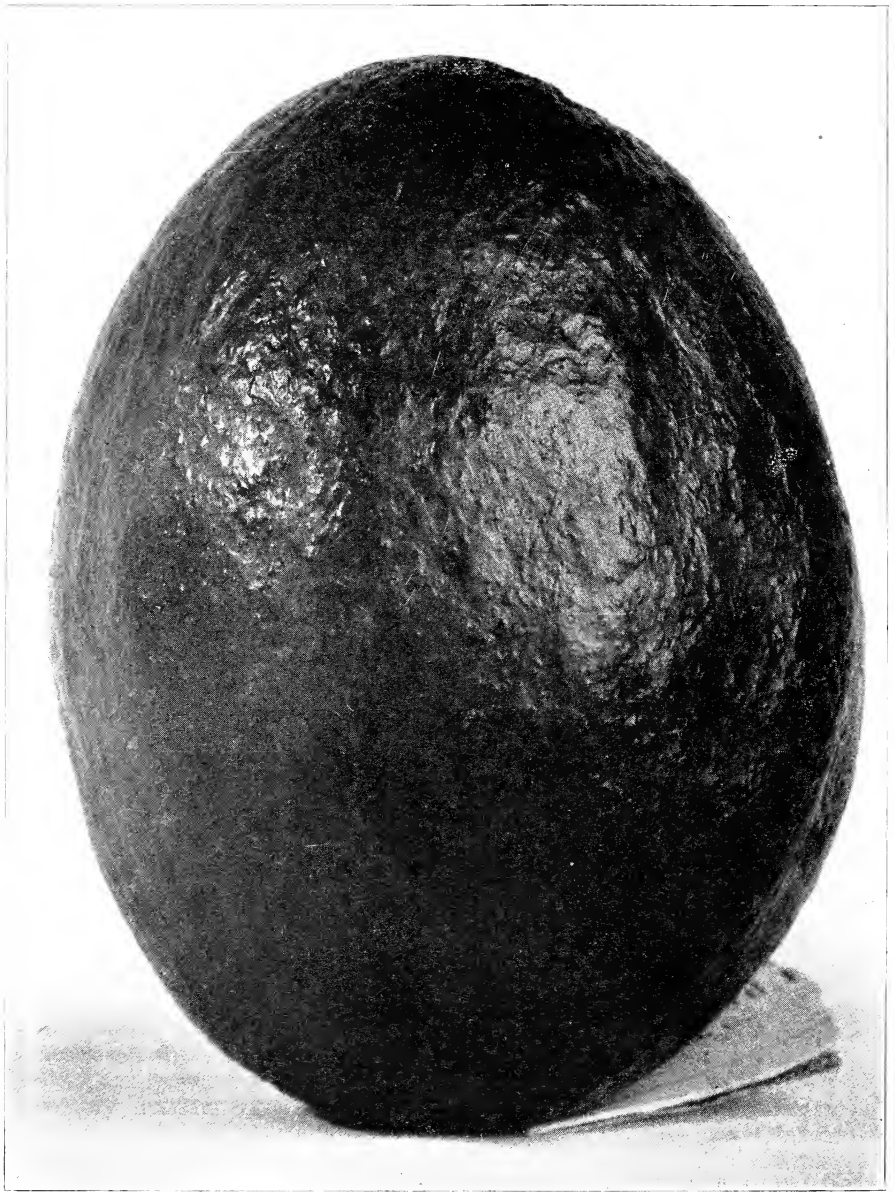
Guatemalan

Taft.—Form broad pyriform, slightly necked; size about medium to very large, weight 14 to 24 ounces, length 5 to $5\frac{1}{2}$ inches, greatest breadth $3\frac{3}{4}$ inches, flesh firm, smooth, light yellow in color with no trace of fiber discoloration; flavor unusually rich and pleasant; quality excellent. Season, May to October in Southern California.

Sharpless.—Form slender pyriform to elongated pyriform with a long neck; size large to very large, weight 16 to 24 ounces; length 6 to $6\frac{1}{2}$ inches; glossy, greenish purple to deep purple in color, with numerous yellowish dots; skin thick; flesh smooth, firm, cream colored, free from fiber discoloration, and of unusually rich, pleasant flavor; quality excellent. Season October to February at Santa Anna, California.

Solano.—Form broadly obovate to oval; size about medium to large; weight 16 to 24 ounces, sometimes attaining to 28 ounces; bright green in color with numerous greenish yellow dots; skin moderately thick; separating readily from the flesh, granular; flesh firm, smooth, yellowish cream color. Season October to November in Florida. Productive and a strong grower.

Panchoy.—Form ovid, slightly oblique at the apex; size above medium to large; weight 15 to 18 ounces; length $4\frac{1}{2}$ inches; greatest breadth $3\frac{1}{2}$ inches; base rounded or obscurely pointed; stem stout, 4 inches long, inserted obliquely without depression; apex obliquely flattened, depressed around the stigmatic point; surface heavily pebbled to rough; green to yellowish in color, with numerous small rounded yellowish dots, skin thick; agreeable flavor; a good, vigorous, productive commercial variety. This is one of the varieties brought to the United States by Wilson Popenoe. The ripening season at Antigua, Guatemala, is from January to April.



LINDA AVOCADO

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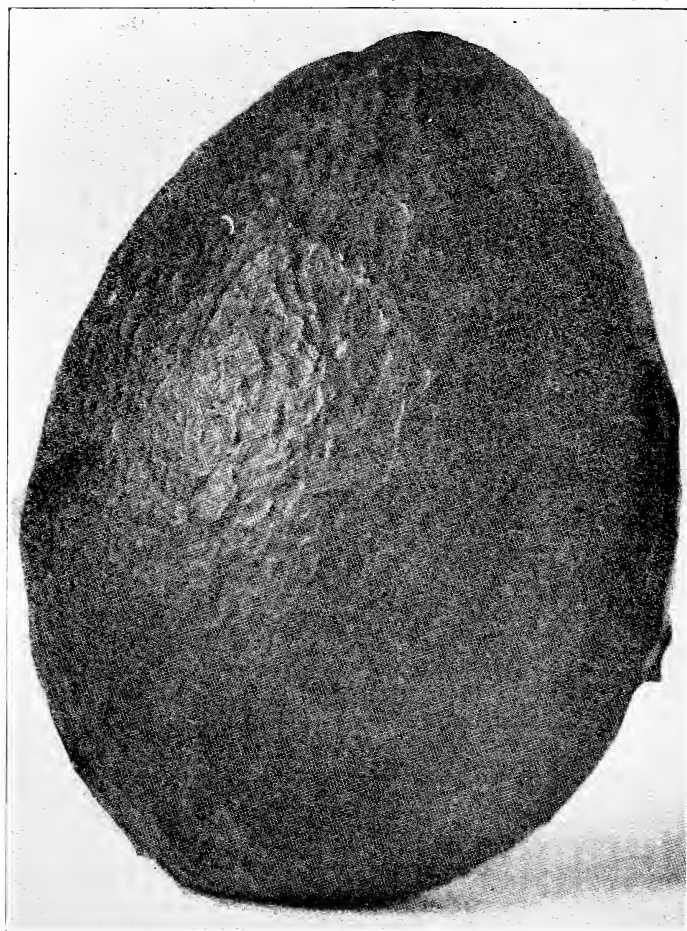
Nimliah.—One of the varieties brought by Wilson Popenoe from Antigue, Guatemala. It is a large fruit; in shape broadly oval, usually somewhat oblique; its weight is from 36 to 45 ounces; surface is deep green in color; skin thick and woody; flesh is yellow, free from discoloration, excellent texture, rich flavor and promises to be one of the most popular Guatemalan Avocados of the larger size. The seed is medium-sized and small in comparison with the size of the fruit. The tree is a vigorous grower and very productive. In Guatemala the ripening season is February and March. It should be a hardy fruit as it originated at an elevation of 5,100 feet.

Linda.—Form pyriform, average length $4\frac{1}{2}$ to 5 inches; weight about 2 pounds; the surface is rough, deep purple in color; skin thick and woody; flesh is firm and yellowish in color, free from fiber and it has a rich, nutty flavor; the seed is of medium size, completely filling the cavity. The tree is vigorous and hardy and a very prolific bearer. Ripening season in Florida is January and February. Krome, of Homeland, Florida, makes a statement that a shipment of Lindas made to New York brought from \$19 to \$21 per dozen. As long as large Avocados are in favor the Linda will be one of the most popular kinds.

Queen.—The Queen is a beautiful Avocado; the skin is rough, deep purple in color, thick and woody. The flesh is firm, yellowish in color, free from fiber and has a very rich, nutty flavor. It is about 5 inches in length and weighs $1\frac{1}{2}$ pounds. The seed is very small, completely filling the cavity. The tree is a vigorous grower, spreading at the base and very productive. Season in Florida, January and February.

Knight.—Form round; weight $1\frac{1}{2}$ pounds; length 4 inches; the surface is rough, green in color; skin thick and woody; flesh is firm, yellow in color, free from fiber and has a very nutty flavor. The seed is of medium size, filling cavity. The tree is a very strong, vigorous grower, hardy and prolific in fruiting. The leaves of the Knight are large, deep green and glossy, and the tree, aside from its fruiting qualities, is very ornamental. Season in Florida is Mid-Winter and Spring.

Spinks.—Form broadly obovate or obconic; size extremely large, weighing from 18 to 34 ounces; length about five inches; greatest breadth about $4\frac{1}{2}$ inches, dark purple in color; skin thick, flesh firm, smooth, rich yellow in color, free from fiber, and of rich, pleasant flavor; quality very good. Season April and August in California, while in Florida it ripens somewhat earlier—about February to June. The Spinks Avocado has been planted on high, sandy land in Florida and has proven its adaptability to same. It is less liable to sunburn than some of the other Guatemalan varieties and does not seem to drop its fruit to such an extent when the weather is hot and the soil is dry. This variety is one of the five selected by the California Avocado Association from a list of more than 150 as being one of the five best for commercial propagation.



FUERTE AVOCADO

T a m p a ::: ::: ::: F l o r i d a

Mexican Varieties

Fuerte.—This wonderful Avocado originated at Altixco, Mexico. It was introduced into California in 1911. It is an unusual variety characterized by great vigor of growth, hardiness and wonderfully good productiveness. It has a long season of ripening, differing in this regard from all Guatemalan and Mexican varieties. It starts to ripen in California in January, and in Florida usually a few weeks earlier. The flesh is a rich cream-yellow color of smooth, buttery texture, very rich and of excellent quality. The fruit contains as much as 30 per cent of fat and is of very pleasant flavor to the taste. The color is green and the shape pyriform to oblong (not necked); size 10 to 16 ounces. The seed is small and tight in the cavity. This Avocado is said to be a hybrid between the Guatemalan and Mexican and it has the best qualities of both. One of the best, if not the very best for commercial planting.

Pueblo.—Form obovoid, slightly oblique; size below medium to medium; weight 8 to 10 ounces; length $3\frac{1}{2}$ inches; surface smooth, glossy, deep maroon-purple in color; flesh rich cream yellow near the seed, changing to pale green near the skin, buttery in texture, and of rich nutty flavor; quality very good. Season December to February in Southern California, a few weeks earlier in Florida. Very hardy. Originated at Altixco, State of Pueblo, Mexico; first propagated in 1911, in which year it was introduced into California. A vigorous and hardy variety, fruiting later in the season than most others of its race. This is one of the five best varieties as recommended by the California Avocado Association and we recommend it for commercial planting.

San Sebastian.—Weight 6 to 8 ounces. Color glossy black. Skin rather thick, separating from the golden yellow flesh, of rich flavor. Prolific and vigorous. Begins to ripen in June in Florida and may develop a secondary late crop with age.

Northrop.—Form obovate to pyriform, sometimes distinctly necked; size small, weight 5 to 8 ounces, length 4 inches; glossy; deep purple in color; skin thin, adhering closely to the flesh, membranous; flesh buttery, cream yellow in color. Season October and November in California, with a second crop maturing in April and May. Originated near Santa Anna,

The C. E. Thomas Nurseries

California; first propagated in 1911 under the name Eells. The tree is vigorous, frost-resistant and productive.

Gottfried.—This remarkable tree is pure Mexican, and hence extremely hardy, adapted to the colder portions of Florida. Mexican fruit is generally very small, but this is certainly an exception. Average weight about a pound; color purplish black when ripe; quality unsurpassed, as rich as a nut, and ripens in August and September. We can recommend this highly for commercial planting on a large scale in middle and northern Florida. No Cuban fruit can compete with it in richness and quality, and nobody would buy Cubans as long as Gottfrieds were to be had. Unlike other Mexicans it peels readily, and its meat is rich yellow, with no objectionable tang or fiber.

PRICES OF AVOCADOS

12 to 18 inches, in boxes (crated).....	\$2.00 each
25 or more, 12 to 18 inches, in boxes (crated).....	1.85 each
50 or more, 12 to 18 inches, in boxes (crated).....	1.75 each
100 or more, 12 to 18 inches, in boxes (crated).....	1.50 each
1000 or more, 12 to 18 inches, in boxes (uncrated).....	1.25 each

NOTE:—The price on thousand lots of Avocado trees is where they are shipped in box cars or the purchaser transports them from the nursery, when it is not necessary to crate them. If it necessary to crate them an additional charge of fifteen cents (15c) each tree will be made.

The Kind of Trees to Plant

Quite a number of years ago when practically all of the Avocados raised in Florida were of the West Indian varieties and very tender and susceptible to cold, it became the belief of many that Avocados could not be raised successfully in Central or North Central Florida. The introduction of hardy Guatemalan and still harder Mexican varieties has disproven this theory entirely.

In Bulletin No. 1, issued June 1, 1918, by Krôme, of Homestead, Florida, an extensive Avocado grower, he reports on how the various varieties stood the cold. The following are extracts from the report:

“From two fairly authentic sources, temperature of 22 degrees was reported and it seems quite certain that this minimum was at least reached. West Indian Avocados of practically all varieties were seriously injured. Trees up to two years of age were quite generally killed back to the ground, and older trees lost their foliage and young growth.

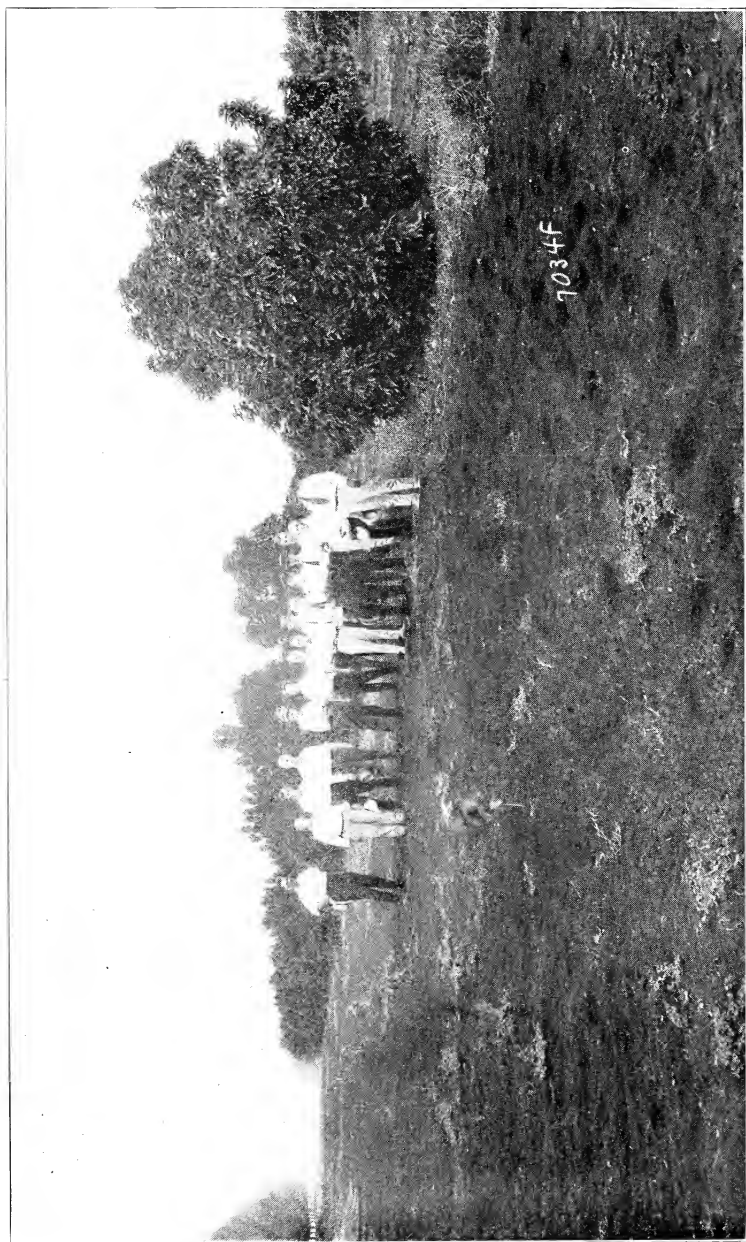
“Such Guatemalans as were located within the area affected by this cold showed a considerably greater immunity from injury than the West Indian, though some varieties lost most of their young growth.

“The Mexican Harman, Ganther, Northrop, San Sebastian and Hybrid Pueblo, as well as a number of Mexican seedlings were entirely unhurt.

“Fuerte lost no fruit, but a few days after the freeze it was observed that the stems of some of the fruit near the ground were slightly frosted. These fruits were then picked and shipped, selling in the New York market at \$20.00 per crate f. o. b. Homestead. Slight scorching of the foliage was the extent of the injury to the Fuerte trees. Some of these trees were in bloom at the time of the freeze and this bloom was damaged about fifty per cent.”

The California Avocado Association in its report made in 1917 of the cold, which occurred during the Winter of 1916-17, states as follows:

“All observers agree in placing the Mexican varieties as the most hardy, with the Guatemalan varieties coming second and th West Indian



Forbes Grove, Ritta Island, Three Years Old

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and Hawaiian sorts third. The Pueblo, which is thought to be a Mexican-Guatemalan hybrid, in general proved to be about as hardy as the true Mexican."

The Fuerte is given as among the most hardy.

The C. E. Thomas Nurseries have received, since the freeze of 1922, four letters from various California growers, stating that while the Guatemalan Avocados were severely injured and in many cases killed to the ground, the Mexican varieties came through without any serious damage.

Summing up the experiences of various Avocado growers in California and Florida, we believe it is safe to assert that the more tender varieties, especially the West Indian, should not be planted except in extreme South Florida or well protected places in Central Florida, such as the south shores of Lakes or high rolling land where the cold is not usually severe.

If there were only Mexican varieties of small size and inferior quality there would be some reason for planting the more tender Guatemalan or West Indian varieties in cold places, but the fact of the matter is, that such Avocados as the Fuerte, Gottfried, Pueblo are the equal if not the superior of many of the best of the more tender kinds.

To those desiring to plant the larger sized fruit, we recommend the Nimlioh, Queen, Linda and Spinks, and we believe that they can be successfully raised as far north as Central Florida, in well protected places; especially where they are banked during the winter of the first one or two years after they are planted.

Avocados banked above the lower limbs, even though severely frost bitten, can be cut back and they will grow a new top in a very short time. In fact, all Avocados, even the Mexican varieties, should be banked the first winter after planting as they are liable to be injured by a very slight freeze when the wood is not hardened up.

While some buyers in the Northern markets seem to prefer a large Avocado at the present time, it is quite probable that the ultimate Avocado will be the medium-sized fruit, such as Fuerte and Gottfried and, in fact, many buyers seem to prefer the medium-sized fruits at the present time. Restaurants and hotels, excepting the higher priced ones, can not afford

The C. E. Thomas Nurseries

to pay from \$1.00 to \$1.75 each for Avocados, even where they only serve a half portion. One-half of either of the Fuerte or Gottfried makes a fair portion, while the Pueblo seems to be the popular fruit to serve as a full portion.

Prospective Avocado planters should bear in mind that an Avocado tree will only bear about so many pounds of fruit, and that if the fruit is large or extremely large, the quantity will be much smaller.

PLANT TREES OF QUALITY

Ten or fifteen years ago in California, Avocado Nurserymen planted Avocado seed in tin cans and very often sold the trees from these cans after they had remained in them for any where from one to two years. The result was, many people expended large sums of money for trees which were absolutely worthless.

If it were not for the fact that it is hard to transplant an Avocado bare rooted and make it live, we would advise planting entirely of trees grown in open field.

In California where they have the hard gumbo soil, they ball their trees, that is, make a ball of earth around the roots while they are being transported and transplanted. In Florida, where the soil is sandy, this is impossible, and for that reason the most feasible and practical way seems to be to plant the seed and raise the Avocados in boxes. Trees may be transplanted in this manner with perfect safety at any season of the year for the reason that the dirt is not removed from around the roots, the dirt being planted just as it comes from the boxes after the sides have been removed. Avocados planted in this manner are not shocked as the roots are not trimmed and the top is not cut off, and for that reason can be safely transplanted at any season if they are properly shaded and watered, and if the ground is properly mulched.

Prior to the time that we, The C. E. Thomas Nurseries, took up the propagation of Avocados, we planted in grove form more than one thousand Avocado trees. These trees were bought from more than a dozen nurseries in Florida and California. It has been our experience that young, vigorous stock planted from boxes made a more rapid and better growth than older

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trees planted bare rooted. We are very sorry to state, however, that we were not fortunate enough to get trees of this kind in every instance. Some of the nurseries shipped us trees that were from three to four feet in height and, as we afterwards learned, had been in boxes after being budded from one to two years. These trees are still about the same size as they were when planted, excepting the ones that died. In fact, some of the trees after being planted a year were not six inches higher than they were when they were first set out. Some of the boxes in which these Avocados were planted were actually falling to pieces from decay.

One reputable nurseryman sent us six Avocados that had evidently been invalids for at least a year. As they were special varieties which we wanted to propagate on account of budwood, we took special pains with them—we fertilized, watered, mulched, shaded and did everything that we knew how to do to bring them out, but it was an impossible task. They died one by one—the last one lingering along for about a year, when it finally passed away it was no larger than when transplanted—in fact, we think it shrunk to some extent.

We would therefore sum the matter up by saying it is a waste of money as well as time to try to make a grove out of Avocado trees which had remained in the boxes long enough to become stunted. The roots not having room to expand become curled and, after a certain length of time, decay to a greater or lesser extent, and it is a very hard job to make a grove from such trees.

Avocados sold planted from boxes should be young, vigorous trees that have not remained in the boxes long enough to become stunted or root bound, and it will be our policy to furnish only such trees.

We received a letter from a customer to whom we had shipped some trees stating that our trees were much smaller than some received from another nursery. This customer stated that the trees the other nursery had sent him were three to four feet high, while ours were only from fifteen to eighteen inches.

We venture to say that if the trees we shipped him are properly taken care of, they will be six feet tall with a good top while the others are still trying to get started. An Avocado tree transplanted from a box at the

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proper time and while it is still in vigorous growing condition will make a rapid, thrifty growth that will be a satisfaction to the grower.

Trees of this kind which we transplanted from boxes in grove form made a growth of from four to seven and a half feet in one year with a spread of three and a half to five feet.

Visit Our Demonstration Planting

At the home of Mr. C. E. Thomas we have an Avocado demonstration which we will be pleased to show you at any time. There you will be able to see Avocados planted every month in the year. There are more than sixty specimens of the various varieties which we are selling, and we can also show you some invalids which have been planted more than a year and which are still about the size they were when transplanted. Any prospective customer coming to Tampa will be shown this grove and, while not large, it is a splendid demonstration of what can be done with Avocados on light sandy soil when properly planted and taken care of.

The Value of a Bearing Avocado Grove

We believe in the future of the Avocado. One grove owner in California stated in a paper read before the Avocado Association that he considered an Avocado grove five years old worth Five Thousand Dollars (\$5,000.00) per acre and groves of the right kind of trees that have been planted have paid a good percentage of profit on that valuation.

Seedling Avocado trees in Tampa and vicinity have yielded \$75.00 and \$150.00 per tree.

A recent letter to The C. E. Thomas Nurseries from J. T. Wheedon, of Yorba Linda, California, states that a number of his Fuerte trees produced more than \$350.00 worth of fruit per tree last year, and special trees have produced even a greater amount.

A. R. Rideout, a California Avocado grower, states in a circular recently issued that by planting Avocados of a certain variety, ten feet apart, it is possible to produce from a ten acre grove when five years old more than sixty thousand (\$60,000.00) dollars worth of fruit. He bases his figures on fifty-seven fruit per tree at twenty-five cents per fruit. He states that this is very possible and very probable and that his trees will bear him up in his figures.

If you only have a small acreage of good Avocado land, why not make a planting of trees 12 x 12, which will take 302 trees per acre. We believe that it is safe to assume that if you plant trees of the right kind and

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properly care for them that they will produce fifty fruit per tree when five years old, or fifteen thousand one hundred (15,100) fruit per acre. At twenty-five cents per fruit, which is less than the average winter price, this will give you three thousand seven hundred seventy-five (\$3,775.00) dollars per acre, or thirty-seven thousand seven hundred fifty (\$37,750.00) dollars for the ten acre grove.

Avocados that bear early, such as the Fuerte, Pueblo, Spinks and Trapp, should produce at least a dozen fruit per tree when three years old, which would mean three thousand six hundred and twenty-four (3,624) Avocados, at twenty-five cents each would total nine hundred and six (\$906.00) dollars per acre, or nine thousand and sixty (\$9,060.00) dollars for the ten acre grove. At four years of age this should be doubled, making a profit of one thousand eight hundred and twelve (\$1,812.00) dollars per acre, or eighteen thousand one hundred and twenty (\$18,120.00) dollars for the ten acregrove.

We do not believe that trees planted even twelve feet apart will interfere to any serious extent until they are six or eight years old, and in that case the trees can be transplanted to other ground and will again start to bear good crops in one or two years from time of transplanting.

If you only have one or two acres of good rich soil ready at the present time you can plant in the above manner and when ready to transplant the surplus trees you can increase your acreage planting from twenty to twenty-four feet apart. The expense of transplanting these trees will be very small as compared to the large quantity of fruit already taken from the intensive planting.

Wilson Popenoe, United States Explorer for the Department of Agriculture, says in his Manual of Tropical and Subtropical fruits:

“The importance of Avocados as a food in those parts of America where it has been known since immemorial times has led students of this fruit in the United States to predict that Avocado culture will some day become more important than citrus culture in California and Florida. There is every reason to believe that eventually the Avocado will be as familiar to the American housewives as the banana is today. The increasing scarcity of meat and the fact that an acre of land will yield a larger crop of fruit when planted to Avocados than it will in any other crop at the present time assures the future importance of the Avocado in this country.”

Eventually Avocados may sell at very much cheaper prices than they do today, but this will be a great many years hence so why not plant an Avocado grove and reap the rich harvest in profits that may be yours?

The C. E. Thomas Nurseries

Planting Avocados

In planting Avocados on high pineland, remove the dirt from a hole of three or four feet in diameter and about two to two and a half feet deep. When filling in, use mostly top soil together with a bushel or more of well-rotted horse, cow, goat or other manure well mixed with the soil.

Ordinary tankage may be used to advantage. The Avocado is a rank feeder and will use to advantage without injury much more fertilizer than the average tree.

Do not use commercial fertilizer on small Avocado trees or for at least a year after they are transplanted. If the holes are prepared as above outlined and the trees are kept well mulched with barnyard manure during the first year this is all the fertilizer that will be required.

If possible, prepare the holes a few weeks in advance of the planting, although this is not absolutely necessary. In planting use plenty of water and keep the young trees well watered while they are becoming established. All growers agree that too much importance can not be attached to giving plenty of water to young trees. In planting on flat woods land, especially land underlaid with hardpan, the holes should be shot with dynamite. Even on land where there is no hardpan and where the ground does not seem especially hard there always seems to be a beneficial effect where dynamite is used. Young trees when planted should be shaded. Sacks opened up and tied on stakes in such a way as to shade the tree from nine o'clock in the morning until five in the afternoon will answer.

Upon receiving trees grown in wooden boxes, they should be thoroughly watered before removing and if trees have been shaken up much and the soil loosened by rough handling, set in a cool, shady place and let remain long enough for the soil to become settled again and water lightly, sufficiently to keep trees in a moist condition. Dig holes just before planting, then first pry off bottom strip with spade or any handy tool, then each side, leaving the last strip to hold and set plant easily in hole. Plant tree so that the bud joint or place of union will drop a little below the surface, and when this is completely healed or grown over, the soil can then be drawn

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over the joint or connection, thereby saving the bud in case of freezing, even though trees were not banked.

On thirsty soils it is well to set trees in a basin three or four inches deep and about eighteen inches across, since these cups thus formed hold water better and facilitate easier watering during the dry season, and the cups or basins can be filled in after trees are a couple of years old. As in planting other trees, too much importance can not be placed on getting the trees well planted. Young trees should be mulched either with stable manure, tobacco stems, dry grass or weeds. It is advantageous to keep them thoroughly mulched with compost as in that case they will require no further fertilization during the first two years.

We advise giving protection to all varieties while trees are small in climates where temperature is likely to reach freezing.

Planting good trees in good soil in a good location, and following this with intelligent cultivation, will surely bring you great reward.

**Table Showing Number of Trees per Acre According
to Distance**

Distance apart, feet	No. of Trees	Distance apart, feet	No. of Trees
1 by 1.....	43,560	15 by 15.....	193
2 by 2.....	10,890	16 by 16.....	170
3 by 3.....	4,840	17 by 17.....	150
4 by 4.....	2,722	18 by 18.....	134
5 by 5.....	1,742	19 by 19.....	120
6 by 6.....	1,210	20 by 20.....	108
7 by 7.....	888	25 by 25.....	69
8 by 8.....	680	30 by 30.....	48
9 by 9.....	537	35 by 35.....	35
10 by 10.....	435	40 by 40.....	27
11 by 11.....	360	45 by 45.....	21
12 by 12.....	302	50 by 50.....	17
13 by 13.....	257	60 by 60.....	12
14 by 14.....	222		

The C. E. Thomas Nurseries

THE AVOCADO

Your Questions Answered

The Avocado is a tropical or semi-tropical fruit.

It is not a pear, and the term "Alligator Pear" is a misnomer.

It is a very delectable fruit and tastes like nothing but an AVOCADO.

The shape varies from round, to oblong or gourd shape.

The size varies from an ounce to two or three pounds.

The color varies from light green to a dark purple, almost black.

It has one large seed. The tree does not come true from seed.

Avocados are ripened off the tree, from one to two weeks after picking.

They are unfit to eat unless thoroughly ripe.

They should be soft enough to spread on bread like butter.

They have a very high food value, and are easily digested.

They contain from 12 per cent to 30 per cent fat, but very little sugar.

They may be eaten with any course of food from soup to nuts.

Spread Avocado on bread or crackers with a little salt.

Eat it as salad with condiments, or on your pie.

It makes a delicious soup and is fine frozen in your ice cream.

The oil is hard to extract, and canning or drying has not been very successful.

Avocados may be canned successfully as a puree.

Wherever grown in quantities they are a staple article of diet.

The taste for them is exceedingly easy to acquire.

Ninety-five per cent of the people like them at first—if given good ones.

The price is high because of scarcity.

Avocados will stand about as much frost as citrus. The Mexican is hardier than the Guatemalan.

The tree is evergreen and makes a beautiful shade tree.

The leaves look somewhat like those of the magnolia.

There are about 180 varieties of avocados.

Seedling trees have grown sixty feet high and with fifty feet spread.

Budded trees do not grow so large.

Budded trees bear in from two to eight years, according to variety.

Orchards may be arranged that fruit may be had the year round.

Trees will carry the fruit weeks after ripe.

The leaves of the Mexican varieties make a delicious tea (like sassafras to the taste).

It is practically impossible to answer the question, "Which is the best variety?"

THE C. E. THOMAS NURSERIES

BRUEN-WEBB BUILDING, TAMPA, FLORIDA

Price List

SEASON—1923-1924

Oranges, Grapefruit, Lemons and Limes

All standard varieties of citrus fruit trees on rough lemon and sour orange roots as listed in catalog, except Tangerines and King Oranges.

	Each	10	100	1000
2 to 3 feet (sold by height only).....	\$0.70	\$6.00	\$55.00	\$500.00
½-inch caliper.....	.85	7.00	65.00	600.00
⅝-inch caliper.....	1.10	8.00	75.00	700.00
¾-inch caliper.....	1.40	11.00	100.00	900.00
Two-year buds, 1-inch caliper.....	1.65	13.50	125.00	1,150.00

Tangerine and King Orange Trees on Rough Lemon and Sour Orange Roots

	Each	10	100	1000
½-inch caliper.....	\$1.10	\$8.00	\$75.00	\$700.00
⅝-inch caliper.....	1.30	10.00	95.00	900.00
¾-inch caliper.....	1.50	13.50	125.00	1,150.00
Two-year buds, 1-inch caliper.....	2.75	26.00	250.00	2,250.00

When a total of 500 trees are ordered, 1000 rates apply.

All trees are cut back and defoliated when being shipped.

Avocado Trees—All Varieties

	Crated
12 to 18 inches, in boxes.....	\$2.00 each
25 or more, 12 to 18 inches, in boxes.....	1.85 each
50 or more, 12 to 18 inches, in boxes.....	1.75 each
100 or more, 12 to 18 inches, in boxes.....	1.50 each
	Uncrated
1000 or more, 12 to 18 inches, in boxes.....	\$1.25 each

NOTE:—The above price on thousand lots of Avocado trees is where they are shipped in box cars, where it is not necessary to crate them; or where the purchaser transports them from the Nursery. If it is necessary to crate them, an additional charge of fifteen cents (15c) each will be made.

Prices are F. O. B. cars at either of our nurseries. Always state whether to ship by freight or express. Terms are cash with order, when immediate shipment is ordered; or where trees are ordered reserved for future shipment at least 10% must accompany the order.

Reduced - ship - 10%

ORDER SHEET

THE C. E. THOMAS NURSERIES

Tampa, Florida

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Enclosed please find.....for.....for which enter
my order and ship as follows in accordance with your catalog prices and terms:

Name

Address (fully)

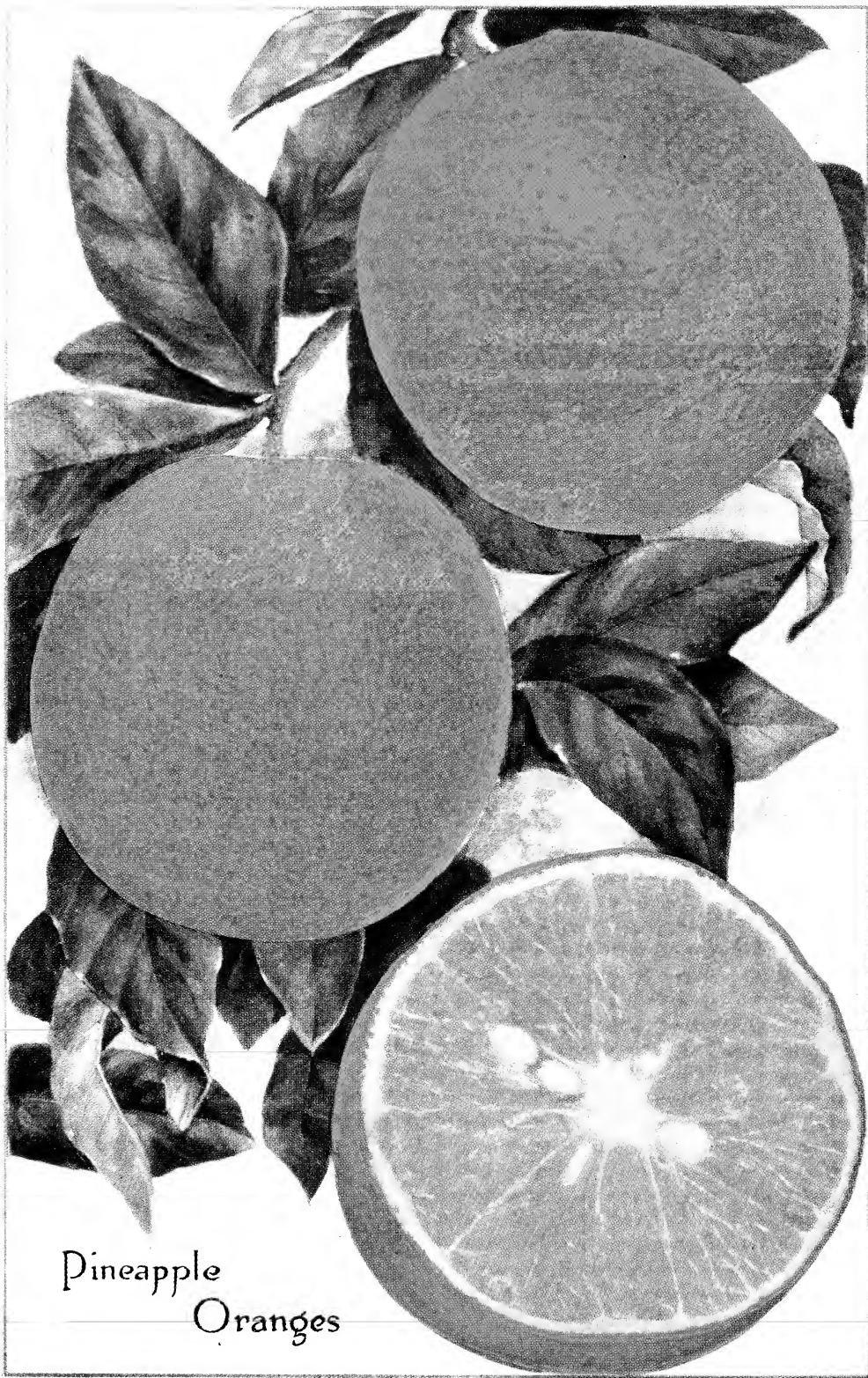
Ship to _____

Town

County _____, State _____

How ship When ship.....

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Pineapple
Oranges